

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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UNITED MICROELECTRONICS CORP., UMC GROUP (USA),  
SEMICONDUCTOR MANUFACTURING INTERNATIONAL CORP.,  
SEMICONDUCTOR MANUFACTURING INTERNATIONAL  
(SHANGHAI) CORP., SEMICONDUCTOR MANUFACTURING  
INTERNATIONAL (BEIJING) CORP., and SMIC, AMERICAS  
Petitioner,

v.

LONE STAR SILICON INNOVATIONS LLC  
Patent Owner.

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Case IPR2017-01513  
Patent 5,973,372

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Before GRACE KARAFFA OBERMANN, JENNIFER MEYER  
CHAGNON, and ELIZABETH M. ROESEL, *Administrative Patent Judges*.

OBERMANN, *Administrative Patent Judge*.

DECISION  
Denying Petitioner's Request for Rehearing  
*C.F.R. § 42.71(d)*

## I. INTRODUCTION

Petitioner filed a Petition (Paper 1, “Pet.”) requesting an *inter partes* review of claims 1 and 4–6 of U.S. Patent No. 5,973,372 (Ex. 1001). Patent Owner filed a Preliminary Response (Paper 7, “Prelim. Resp.”). We entered a decision (Paper 8, “Dec.”) that denied the Petition upon determining that the information presented did not support institution of trial. Petitioner filed a request for rehearing of that decision. Paper 9 (“Req. Reh’g”). This paper resolves the request for rehearing.

In response to a request for rehearing, we review a decision whether to institute trial for an abuse of discretion. 37 C.F.R. § 42.71(c). “The burden of showing a decision should be modified lies with the party challenging the decision.” 37 C.F.R. § 42.71(d). Further, “[t]he 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.* We deny the request because Petitioner does not establish an abuse of discretion.

## II. DISCUSSION

The word “adjacent” appears twice in claim 1 (the only independent claim challenged in the Petition). Ex. 1001, 7:42–8:8. The institution decision turned on the proper construction of the word “adjacent” in claim 1. Dec. 8.

Taking account of the “persuasive information” presented by Patent Owner in the Preliminary Response (Dec. 13 (citing Prelim. Resp. 25–31)), we determined that the Petition was based on an incorrect construction of the claim term “adjacent” and, as a result, advanced patentability challenges that

rested on information (including opinion testimony) not “tethered adequately to the correct claim construction.” Dec. 16; *see* Pet. 16–21 (Petitioner’s proposed claim construction); *see also* Dec. 8–18 (discussing correct claim construction and insufficiency of the information presented to support trial institution). Accordingly, we denied the Petition because the information presented did not show a reasonable likelihood that Petitioner would prevail at trial with respect to at least one patent claim. Dec. 8–18; 35 U.S.C. § 314(a) (authorizing trial only when that threshold showing is made).

Petitioner’s request for rehearing asserts arguments pertaining to (1) the provisions of 37 C.F.R. § 42.108(c) (“Rule 42.108(c)”) (Req. Reh’g 3); (2) the Administrative Procedure Act (“APA”) (*id.* at 5); (3) the claim construction adopted in the institution decision (*id.* at 6–8); and (4) factual findings made on the preliminary record (*id.* at 8–14). We organize our discussion into four parts, addressing each argument in turn.

#### A. Rule 42.108(c)

We first turn to the argument that the Board abused its discretion by “ignoring” Rule 42.108(c). Req. Reh’g 3. Under that rule, when a patent owner submits testimonial evidence with a preliminary response, the Board views any “genuine issue of material fact created by such testimonial evidence” “in the light most favorable to the petitioner solely for purposes of deciding whether to institute an *inter partes* review.” 37 C.F.R. § 42.108(c). Petitioner asserts that the preliminary record included conflicting opinion testimonies and, therefore, the Board was obligated to institute trial to resolve the conflict. Req. Reh’g 3–5 (advancing that argument, but identifying no particular factual dispute overlooked by the Board).

In Petitioner’s view, Rule 42.108(c) sets up a “process” by which “factual disputes between experts” must be subjected to “further examination of the veracity of the respective opinions.” *Id.* at 4. By way of support, however, Petitioner directs us to non-binding Board decisions, none of which suggests that trial institution is warranted whenever the Board discerns a difference of opinion between two opposing declarants. *Id.* at 3–4 (citations omitted). In that regard, Petitioner’s analysis does not account for the words “genuine” and “material” in the terms of Rule 42.108(c). *Id.*

In addition, Rule 42.108(c) does not undercut the statutory mandate that precludes trial institution where, as here, the information presented in a petition and preliminary response fails to make out the threshold showing for review. *See* 35 U.S.C. § 314 (a) (authorizing review only upon a showing of “a reasonable likelihood that the petitioner would prevail with respect to at least 1” challenged claim). Taken to its natural end, Petitioner’s view of the rule would compel the Board to institute trial whenever a preliminary record includes declarations that reflect differing opinions—which is, of course, an untenable result. Petitioner’s argument is inconsistent with Section 314(a), which specifies a condition under which review may be instituted, but does not specify conditions under which review must be instituted. *Id.*; *see* Dec. 8–18 (articulating reasons why Petitioner, in this case, is not reasonably likely to prevail at trial with respect to at least one patent claim).

Petitioner’s further observation—that “the relative strength of” opposing witness “opinions are appropriate for the routine discovery conducted during” a trial—is of no avail. *Req. Reh’g* 3 (citing 37 C.F.R. § 42.51(b)(1)). The Board is under no obligation to subject a patent owner to the burden and expense of discovery and trial where a petition asserts

patentability challenges that are keyed to an incorrect claim construction. On that point, our rules provide that a petition must identify “[h]ow the challenged claim is to be construed.” 37 C.F.R. § 42.104(b)(3).

Accordingly, we are unpersuaded that the Board abused its discretion by “ignoring” Rule 42.108(c). Req. Reh’g 3.

*B. Administrative Procedure Act*

Petitioner asserts that, by denying review “without providing the Petitioner an opportunity to examine” Patent Owner’s declarant, the Board violated due process protections codified in the APA. Req. Reh’g 5. As an initial matter, we determine that Petitioner does not establish that a rehearing request in our forum is an appropriate vehicle for asserting an APA violation. *See generally* Req. Reh’g (nowhere addressing that point); *see also* 37 C.F.R. § 42.71(d) (“Rule 42.71(d)”) (circumscribing permissible bases for a request for rehearing); *Taiwan Semiconductor Mfg. Co., Ltd. v. Godo Kaisha IP Bridge I*, Case IPR2017-01862 (PTAB Mar. 12, 2017) (Paper 14, 3) (questioning whether “allegations of an APA violation are properly raised in” a request for rehearing under Rule 42.71(d)).

Setting aside for a moment the question of whether an APA violation properly may be raised under Rule 42.71(d), we are not persuaded by Petitioner’s contention. Petitioner argues that the Board must “provide the parties with an opportunity to address a claim construction presented for the first time in [a] final written opinion.” Req. Reh’g 5–6. But we did not issue a “final written opinion.” *Id.* Instead, we determined that Petitioner did not meet the threshold showing required for trial institution. 35 U.S.C.

§ 314(a). Petitioner identifies no authority that compels the Board to institute trial where the challenge is keyed to an incorrect claim construction.

Before trial is instituted, during the preliminary stage of a proceeding, the Board's function is to assess whether the information presented in a petition and any preliminary response filed "shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the" challenged patent claims. 35 U.S.C. § 314(a). As a culmination of that assessment, the Board may, and routinely does, decline to institute trial where the patentability challenge asserted in a petition is keyed to an incorrect claim construction. *See, e.g., Schlumberger Tech. Corp. v. EnerPol, LLC*, Case IPR2018-00077 (PTAB Apr. 25, 2018) (Paper 16, 6–17); *United Patents, Inc. v. Uniloc Luxembourg S.A.*, Case IPR2018-00057 (PTAB May 11, 2018) (Paper 9, 3–8); *Duo Security Inc. v. Strikeforce Tech., Inc.*, Case IPR2017-01064 (PTAB Oct. 16, 2017) (Paper 7, 6–11); *Google Inc. v. InfoGation Corp.*, Case IPR2017-00819 (PTAB Sept. 11, 2017) (Paper 16, 7–14, 17–19, 21–22); *Eiko Global, LLC v. Blackbird Tech LLC*, Case IPR2017-00980 (PTAB Sept. 1, 2017) (Paper 16, 5–36).

Petitioner had a full and fair opportunity to address the claim construction issue in the Petition and took full advantage of that opportunity. Pet. 14–22. Further, as Petitioner concedes (Req. Reh'g 5 n.1), Petitioner could have sought leave to submit a reply to the Preliminary Response, which identified the claim construction ultimately adopted by the Board. In addition, Petitioner, in the request for rehearing, had a full and fair opportunity to raise any of its own claim construction arguments that were allegedly misapprehended or overlooked by the Board, but Petitioner did not do so (as discussed in the next section). Our substantive disagreement with

the claim construction in the Petition does not amount to a due process violation under the APA.

### *C. Claim Construction*

Petitioner does not assert that the Board adopted an incorrect claim construction in the institution decision. Req. Reh’g 6–8; *see id.* at 6 (assuming, for purposes of rehearing, that Patent Owner’s “construction is found to be correct”). Instead, Petitioner asserts that, even if Patent Owner’s claim construction is correct, the Board should have viewed the information presented in the Petition as sufficient to make out the threshold showing for review, because Petitioner’s proposed construction was “narrower and a subset of” Patent Owner’s construction. *Id.* at 7; *see id.* at 6–8 (for full argument on that point). That argument is unpersuasive for two reasons.

First, Petitioner does not show that its proposed claim construction was “narrower” or “a subset” of the construction advanced by Patent Owner. *Id.* at 7. The Petition stated “that the only<sup>[1]</sup> reasonable construction of the ‘disposed adjacent’ terms of claim 1 is ‘formed adjacent’ *such that*

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<sup>1</sup> The Petition also contemplated that Patent Owner might advance a “different construction” under which “the metal silicide layer can be adjacent to a layer of epitaxial silicon previously formed on the upper surface of the shallow junction.” Pet. 21–22. Petitioner argues that the Board “did not acknowledge” that “alternative construction.” Req. Reh’g 8. In fact, we expressly acknowledged it. Dec. 17 n.3. Given that Petitioner averred that “this construction is not supported by the” specification of the patent at issue (Pet. 21–22) and Patent Owner, ultimately, did not advance it, we discern no error in our decision declining to further address that alternative construction. *See* Dec. 9–16 (discussing claim construction); Req. Reh’g 8 (the Board “abused its discretion” by failing to “acknowledge the alternative construction”).

***something is formed at one point in the process that does not need to remain in the same relative position throughout the fabrication process.***”

Pet. 20–21 (citing Ex. 1002 ¶¶ 42–45) (emphasis added). On that basis, Petitioner advanced challenges that depended on a construction of claim 1 that is broad enough to embrace an integrated circuit “in which a claimed feature is present during an intermediate step of the fabrication process but not necessarily in subsequent process steps or the final product.” Dec. 11; *see* Pet. 20, 23–39 (advancing that proposed construction). The Board rejected that view, observing that, as properly construed, claim 1 is not broad enough to encompass a device, such as the integrated circuit disclosed in Saito,<sup>2</sup> in which “a claimed feature is present during an intermediate step of the fabrication process” but “is removed by selective etching in a subsequent process step and, thus, is absent in the integrated circuit ultimately produced by the process.” Dec. 11–12; *cf.* Pet. 3, 17, 20–21.

We declined to adopt Petitioner’s expansive view of claim 1, which would enlarge the scope of the apparatus claim to capture structure present only during an intermediate step of fabrication. Instead, we determined that “the plain terms of claim 1 require that the metal silicide layer and the epitaxial silicon layer simultaneously are located ‘adjacent the shallow junction’ ***in the specified integrated circuit.***” Dec. 12 (emphasis added). On this record, we are not persuaded that Petitioner proposed a claim construction that is “narrower” or “a subset” of the construction advanced by Patent Owner in the Preliminary Response. Req. Reh’g 7.

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<sup>2</sup> Saito et al., Japanese Patent Publication No. JPH08-204187, published August 9, 1996, with certified English translation, Ex. 1005.



Second, although the request for rehearing argues that “Petitioner’s obviousness arguments are equally applicable to the broader construction” (Req. Reh’g 8), Petitioner does not identify any argument or evidence in the Petition that we misapprehended or overlooked. The Board is not required to “play archeologist with the record” or endeavor to discover a challenge that might have been asserted had a petitioner identified the correct claim construction. *DeSilva v. DiLeonardi*, 181 F.3d 865, 866–67 (Fed. Cir. 1999). A petitioner should not expect the Board to search the record in an attempt to piece together a successful argument where, as here, the challenge actually stated in the Petition is not “tethered adequately to the correct claim construction.” Dec. 16; *see* 37 C.F.R. § 42.22(a)(2) (a petition must include “[a] full statement of the reasons for the relief requested”). Our analysis properly focused on the arguments set forth in the Petition. Dec. 8–18.

#### *D. Factual Findings*

Petitioner submits that the Board violated a mandate to “articulate its reasoning” in a “Final Written Decision.” Req. Reh’g 9 (quotation omitted). The Board, however, did not issue a final written decision in this proceeding. Dec. 1. We denied review based on the information presented in a petition and preliminary response. *Id.* at 8–18; *see* 35 C.F.R. § 314(a) (authorizing the Director, and by delegation the Board, to assess the information presented in a petition and any preliminary response filed to determine whether a petitioner is reasonably likely to prevail at trial with respect to at least one patent claim and elect to institute trial, or not, on that basis). Petitioner’s assertion that our factual findings are unsupported by

“substantial evidence”—a standard applicable to factual findings made on a full trial record—is misplaced. Req. Reh’g 9.

Petitioner also submits that “[t]he entirety of the Board’s analysis as to why the claims are not obvious” “spans 8 lines of the” institution decision and includes “a string cite to the Preliminary Response.” Req. Reh’g 8. The Board pointed out with sufficient clarity why the information presented failed to meet the threshold for institution. For example, we indicated where Patent Owner, in the first instance, identified the correct claim construction and, also, persuasively argued that the information presented failed to establish a reasonable likelihood that Petitioner would prevail at trial with respect to at least one challenged patent claim under the correct claim construction. Dec. 13, 17. We also explained why Patent Owner’s proposed construction was correct (*id.* at 9–16) and, further, considered the claim charts advanced by Petitioner’s declarant, which did not “articulate clearly how the prior art discloses or suggests the” properly construed “adjacency limitations of claim 1 in a completed integrated circuit.” *Id.* at 17.

We are mindful that the rehearing request raises new arguments, not articulated clearly in the Petition. For example, the request for rehearing argues that “the titanium silicide film” in Saito’s process<sup>3</sup> “is not completely

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<sup>3</sup> Petitioner’s rehearing arguments, pertaining to certain other grounds of unpatentability addressed in the institution decision, rise and fall with the arguments presented in connection with the ground based on Saito. Req. Reh’g 13 (regarding “Ground 3,” the Board abused its discretion “[f]or the same reasons as for Ground 1”); *id.* at 13–14 (asserting that the Board erred in connection with “Ground 4” “for the same reasons as articulated above” in connection with “FIG. 6 of Saito”); *id.* at 14 (arguing that Board erred in connection with “Ground 5” “[f]or the reasons given above” in the context of “the Saito FIG. 6 embodiment”).

removed” (Req. Reh’g 10) and that a genuine dispute arises regarding “whether the 100-200nm disclosure in Saito renders obvious” the challenged claims when evaluated under the correct construction of “adjacent”; that is, “close to; laying near” (*id.* at 11–12) (bridging sentence); *but see* Dec. 16 (correct construction is “close to; lying near”). Petitioner does not identify where, if at all, those arguments were presented in the Petition. Req. Reh’g 10, 11–12. Petitioner also attempts to recast other arguments in view of the correct claim construction. For example, Petitioner argues that a metal “silicide film remains throughout the process illustrated in” Saito’s Figure 1 and that “a functioning transistor was created as of FIG. 1(c) and processing could stop after this step.” *Id.* at 10. Those arguments were not presented in the Petition in the context of the correct claim construction.

Petitioner identifies no abuse of discretion in the Board’s determination that the Petition did not explain adequately how or why the asserted prior art references disclose or suggest the properly-construed adjacency requirement of claim 1. *See* Dec. 16–17 (bridging paragraph, articulating reasons for that determination). In that regard, the Petition argued “that the term ‘adjacent’ in claim 1 *must be read* to ‘mean “directly adjacent” or “in physical contact with” *during the formation* of each layer, *and not necessarily in the final structure.*” *Id.* at 11 (quoting Pet. 17, 20–21) (emphasis added). The request for rehearing represents a post hoc attempt to back away from that construction, recast the arguments and prior art asserted in the Petition, and present a new version of the patentability challenges under the correct claim construction. *Compare* Req. Reh’g 8–14, *with* Pet. 23–68. A request for rehearing is not an opportunity to present new arguments, therefore, we reject that endeavor. It would be manifestly

unfair to Patent Owner for us to entertain those new arguments at this late juncture. *See* Req. Reh’g 8–14 (asserting new arguments keyed to the correct claim construction as identified in the institution decision).

With respect to the challenge based on Yu,<sup>4</sup> Petitioner submits that Patent Owner presented arguments in the Preliminary Response, directed to Petitioner’s incorrect claim construction, without explaining adequately why the challenged claims “are not met under its own, [allegedly] broader construction.” Req. Reh’g 12. Petitioner contends that Patent Owner “identifies only” reasons why “Petitioner has not met its burden.” *Id.* Pointing out why a petitioner has not met its burden, however, is precisely the function of a preliminary response. *See* 37 C.F.R. § 42.107(a) (a patent owner may file a preliminary response to set forth “reasons why no *inter partes* review should be instituted”).

Patent Owner was under no obligation to file a preliminary response, much less “explain why” the challenged patent claims “are not met under its own” proposed construction. Req. Reh’g 12. Petitioner bears “the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity” by reference to the record “the evidence that supports the grounds for the challenge to each claim”)). That burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in our administrative review process).

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<sup>4</sup> Yu, US 5,409,853, issued April 25, 1995, Ex. 1007 (“Yu”).

Under these circumstances, Petitioner shows no abuse of discretion in the factual findings set forth in our institution decision.

### III. CONCLUSION

For the above reasons, we deny Petitioner's request for rehearing of our decision declining to institute *inter partes* review.

### IV. ORDER

It is

ORDERED that Petitioner's request for rehearing is *denied*.

IPR2017-01513  
Patent 5,973,372

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