

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MITSUBISHI PLASTICS, INC.,
Petitioner,

v.

CELGARD, LLC,
Patent Owner.

Case IPR2014-00524
Patent No. 6,432,586 B1

Before FRANCISCO C. PRATS, DONNA M. PRAISS, and
CHRISTOPHER L. CRUMBLEY, *Administrative Patent Judges*.

CRUMBLEY, *Administrative Patent Judge*.

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

Petitioner, Mitsubishi Plastics, Inc. ("MPI"), requests rehearing of our Decision denying institution of *inter partes* review of claims 1-6 and 12 of U.S. Patent No. 6,432,586 B1 (Ex. 1001, "the '586 patent"). Paper 15,

“Req. Reh’g.” In our Decision (Paper 12, “Dec.”), we instituted *inter partes* review on the following ground:

1. Whether claims 7–11 are unpatentable under 35 U.S.C. § 103 as having been obvious over the combined disclosures of Tojo and Kejha.

Dec. 26. We denied institution on all other asserted grounds, finding that MPI had not established that the cited prior art taught or suggested a battery separator layer *adapted to at least block dendrite growth and to prevent electronic shorting*, an element present in each of claims 1–6 and 12. *Id.* at 14. In its Request, MPI contends that this result was an abuse of discretion, and requests that we institute *inter partes* review of claims 1–6 and 12. Req. Reh’g 1.

For the reasons that follow, the request is *denied*.

STANDARD OF REVIEW

When rehearing a decision on a petition to institute an *inter partes* review, the Board “will review the decision for an abuse of discretion.” 37 C.F.R. § 42.71(c). “An abuse of discretion occurs where the decision is based on an erroneous interpretation of the law, on factual findings that are not supported by substantial evidence, or represents an unreasonable judgment in weighing relevant factors.” *Lacavera v. Dudas*, 441 F.3d 1380, 1383 (Fed. Cir. 2006) (quoting *Star Fruits S.N.C. v. United States*, 393 F.3d 1277, 1281 (Fed. Cir. 2005)). The party requesting rehearing has the burden of showing the decision should be modified, and “[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.” 37 C.F.R. § 42.71(d).

ANALYSIS

MPI argues that, in not instituting *inter partes* review of claims 1–6 and 12, we misapprehended its obviousness arguments based on the Tojo reference. Req. Reh’g 3. Specifically, MPI challenges our finding that it failed to establish that Tojo discloses a composite layer “adapted to at least block dendrite growth.” *Id.* The primary basis for this challenge is that, in two other *inter partes* review proceedings involving the ’586 patent, the Board found that the petitioners in those cases had established a reasonable likelihood that Tojo discloses the required composite layer adapted to at least block dendrite growth. *See SK Innovation Co. v. Celgard, LLC*, Case IPR2014-00679 (“the SKI proceeding”), Paper 11, 13–14; *LG Chem, LTD v. Celgard, LLC*, Case IPR2014-00692 (“the LG proceeding”), Paper 13, 13–14.

A. The Board Did Not Overlook Dr. Abraham’s Testimony

MPI contends that its Petition presented the “same evidence” that was presented in the SKI and LG proceedings and that because the Board found “equivalent disclosures” of Tojo sufficient to anticipate and/or render obvious claims 1-6 and 12 in those cases, we must do the same here. Req. Reh’g 2–3. It is not the case, however, that the “same evidence” was presented in all three Petitions. In the present case, MPI proffered the

testimony of Dr. Kuzhikalail Abraham, via a declaration dated February 14, 2014. Ex. 1003. By contrast, the Petitioner in the LG proceeding relied on an April 25, 2014, declaration of Dr. Abraham (IPR2014-00692, Ex. 1003, “Abraham LG Decl.”) that is not identical to the one submitted in the present case, and the Petitioner in the SKI proceeding relied on the testimony of a different expert, Dr. Craig Arnold (IPR2014-00679, Ex. 1004, “Arnold SKI Decl.”). It simply is not true that the records in all three cases present the “same evidence.”

In the related reviews, the Petitioners’ experts provided testimony that linked Tojo’s use of inorganic materials in a ceramic layer—disclosed by Tojo to prevent penetration by microparticles—to the inherent property that the layer would block dendrite growth. *See* Arnold SKI Decl. ¶ 46; Abraham LG Decl. ¶ 43. For example, in the LG proceeding, Dr. Abraham testified that “[b]y including a layer with inorganic materials that is not prone to being penetrated by microparticles, Tojo provides a layer that is not prone to being penetrated by dendrite growth.” Abraham LG Decl. ¶ 43. Dr. Abraham also stated that “the microparticles that are blocked by Tojo’s separator include[] dendrites.” *Id.* Thus, Dr. Abraham provided *some* rationale linking the blocking of microparticles to the blocking of dendrites.

In the present case, Dr. Abraham’s testimony differs in a small but material respect, in that it leaps from a statement about Tojo blocking microparticles to the conclusion that Tojo must block dendrite growth. No rationale connecting the statement and the conclusion is provided. Dr. Abraham first testifies that Tojo “describes a separator that provides a

battery that ‘has a low rate of . . . electroconductive microparticle penetration during cell manufacturing and storage.’” Ex. 1003 ¶ 44 (quoting Tojo, Ex. 1005 ¶ 8). Then, he directly concludes that “[t]hus, [Tojo] complies with the requirement of said separator layer being adapted to at least block dendrite growth.” *Id.* No further testimony on the subject was provided. Dr. Abraham, in direct contrast to his testimony in the LG proceeding, provides no specific rationale linking a low rate of microparticle penetration to dendrite growth.

In its Request, MPI points to various portions of Dr. Abraham’s testimony that allegedly disclose “that dendrite growth is a form of metallic penetration resulting in short circuits.” Req. Reh’g 5–6. Even if this is the case, there is nothing in the record to indicate that “metallic penetration” is equivalent to “microparticles.” Furthermore, the cited portions of Dr. Abraham’s testimony nowhere equate explicitly the blocking of microparticles and the blocking of dendrites. In fact, the portions of Dr. Abraham’s testimony MPI cites do not even mention the word “microparticles.”

In sum, we did not overlook or misapprehend any portion of Dr. Abraham’s testimony regarding Tojo. The differences between Dr. Abraham’s declaration in the present case and the one submitted in the LG proceeding are material, and lead to the different results in our institution decisions.

B. The Board Did Not Overlook Evidence Regarding Inorganic Particles

The testimony of Dr. Abraham aside, MPI also argues that we overlooked evidence that Tojo discloses inorganic particles. Req. Reh’g 8–9. As noted above, however, it is not the disclosure of inorganic particles in Tojo that we found lacking from MPI’s Petition, but rather the sufficiency of the evidence establishing any link between Tojo’s microparticle-blocking ability and the claimed ability to block dendrite growth. The portions of the Petition’s claim charts reproduced in the Request do not establish such a link.

Instead, MPI relies on our claim construction, in which we noted that the dendrite growth limitation of claim 1 is functional, and thus covers “any and all embodiments which perform the recited function.” *Id.* at 7 (quoting Dec.10). MPI also points to our statement that “the ’586 patent does not explain with any specificity what structural or functional properties,” other than inorganic particles, are possessed by the ceramic layer. *Id.* at 8 (quoting Dec. 10–11). MPI characterizes these two statements as a finding that “the recited functions” of blocking dendrite growth “would be performed by inorganic particles.” *Id.* at 7. From these statements, MPI reasons that *any* ceramic layer with inorganic particles in an amount disclosed in the ’586 patent will block dendrite growth, as claimed.

MPI interprets our Decision too broadly. While we found that inorganic particles were the only structural characteristic of the ceramic layer disclosed in the ’586 patent, the patent itself is silent as to the dendrite-blocking capabilities of the inorganic particles. MPI does not direct us to

any portion of the '586 patent to the contrary. Our conclusion in the SKI and LG proceedings that “the '586 patent discloses [dendrite blocking] as being the result of combining inorganic particles with essentially any polymer” (*see, e.g.*, LG proceeding, Paper 13, 13) was informed by the testimony of experts linking inorganic particles to blocking dendrite growth. As noted above, such testimony is lacking in the present case.

Finally, MPI argues that because we instituted review of claim 7, we must also institute review of claim 1. Req. Reh’g 12–13. This argument ignores that claim 7 does not contain a functional element directed to blocking dendrite growth. Our decision to institute review of claim 7 was not based on any determination of whether Tojo has a ceramic layer that blocks dendrite growth and, therefore, has no bearing on our conclusion that Tojo fails to meet the functional limitation of claim 1.

The evidence of inorganic particles in Tojo was considered in our Decision to Institute and, when considered in light of the Petition and Dr. Abraham’s declaration in this proceeding, found to be insufficient to establish a reasonable likelihood of unpatentability. We did not misapprehend or overlook the evidence or arguments now raised by MPI.

C. The Board’s Decision Does Not Undermine Uniformity and Predictability

MPI argues that our “conflicting decisions” in this and the SKI and LG proceedings “undermine the predictability and uniformity of decision-making by the PTAB.” Req. Reh’g 13. As outlined above, we disagree that

our decisions in this proceeding and the SKI and LG proceedings are in conflict because of the different records presented in each case.

Nor is it sufficient merely to point out that the disclosure of Tojo was found to be sufficient in the related cases, but the “equivalent disclosure” of Tojo was found lacking in the present case. Req. Reh’g 3. In other words, it is not enough to argue that “[e]ither Tojo’s ceramic composite layer blocks dendrite growth, or it does not.” *Id.* at 13. The question before the Board is whether Petitioner has shown that the record *in this proceeding* establishes a reasonable likelihood that claims are unpatentable. *Inter partes* reviews are adversarial, adjudicative proceedings; as such, the Board’s findings in *inter partes* reviews rely on the arguments provided by the parties in their papers, as well as the testimony of witnesses. This is especially true where, as here, expert testimony is relied upon to establish an inherent property of the prior art disclosure. Petitioners have the responsibility to present, through argument and evidence, a reasonable likelihood of unpatentability of the challenged claims. The rule MPI proposes—that every Petition citing the same art must be decided identically, regardless of the arguments set forth in the Petition—ignores the adversarial, adjudicative nature of an *inter partes* review. *See* H.R. Rep. No. 112-98, pt.1, at 46–47 (the AIA “converts inter partes reexamination from an examinational to an adjudicative proceeding, and renames the proceeding ‘inter partes review’”).

D. MPI's Policy-Based Arguments Are Unpersuasive

MPI concludes its Request by presenting two policy-based arguments grounded in the “interest in removing invalid patents” and “judicial economy.” Req. Reh’g. 14–15. First, we note that these arguments are being made for the first time in the Request, and as such, cannot be the basis for rehearing. The Board cannot have misapprehended or overlooked an argument that was not presented in the Petition.

Second, even if we were to consider these policy-based rationales for institution, we would not find them persuasive. Similar arguments could be made in every petition for *inter partes* review brought before the Board; where, as here, the Petition has not established a reasonable likelihood of unpatentability with respect to certain claims, we are unconvinced that policy-based arguments alone provide sufficient basis for instituting trial on those claims.

CONCLUSION

For the foregoing reasons, the Board did not abuse its discretion in determining that the Petition and accompanying evidence failed to establish a reasonable likelihood that MPI would prevail in showing unpatentability of claims 1–6 and 12 of the ’586 patent.

ORDER

Accordingly, it is

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

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