

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CURIO BIOSCIENCE, INC.,
Petitioner,

v.

PROGNOSYS BIOSCIENCES INC. and 10X GENOMICS, INC.,
Patent Owner.

IPR2024-01289
Patent 10,480,022 B2

Before MICHAEL J. FITZPATRICK, ANNETTE R. REIMERS, and
SHERIDAN K. SNEDDEN, *Administrative Patent Judges*.

SNEDDEN, *Administrative Patent Judge*.

DECISION

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

I. INTRODUCTION

Curio Bioscience, Inc. (“Petitioner”) requests rehearing of the Board’s Decision (Paper 10) (“Decision” or “Dec.”) denying institution of *inter partes* review of claims 1–7, 11–15, 17, 19, and 27–29 of U.S. Patent No. 10,480,022 B2 (“the ’022 patent,” Ex. 1001). Paper 11 (“Request for Rehearing” or “Req. Reh’g.”). Prognosys Biosciences Inc. and 10x Genomics, Inc. (collectively, “Patent Owner”) filed a Response to Petitioner’s Request for Rehearing. Paper 14 (“Response”).

In our Decision, we declined to institute *inter partes* review because we determined that Petitioner had not met its threshold burden to show a reasonable likelihood of success in proving that at least one of the challenged claims is unpatentable based on the grounds advanced in the Petition. More specifically, we found that the Petition did not sufficiently show that Cantor teaches or suggests the use of beads to identify the spatial location of a biological molecule within a tissue sample and that Armani did not cure that defect of Cantor. Dec. 20–22, 24–25.

Petitioner seeks reconsideration of our Decision because it argues that 1) our analysis of Ground 2 in the Petition is based on a factual misapprehension; 2) we committed legal error “by carrying out an implicit claim construction to add additional limitations not found in the claims;” and 3) we committed another legal error by “failing to consider the prior art as modified and presented in the Petition in its obviousness analysis.” Req. Reh’g. 4.

For the reasons that follow, Petitioner’s Request for Rehearing is *denied*.

II. LEGAL STANDARD

Pursuant to 37 C.F.R. § 42.71(d):

A party dissatisfied with a decision may file a single request for rehearing without prior authorization from the Board. The burden of showing a decision should be modified lies with the party challenging the decision. 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.

When reconsidering a decision on institution, we review the decision for an abuse of discretion. 37 C.F.R. § 42.71(c). An abuse of discretion exists where a “decision [i]s based on an erroneous conclusion of law or clearly erroneous factual findings, or . . . a clear error of judgment.” *PPG Indus. Inc. v. Celanese Polymer Specialties Co.*, 840 F.2d 1565, 1567 (Fed. Cir. 1988).

A rehearing request is not an opportunity for the requesting party to reargue its case or merely to express disagreement with the underlying decision. Nor is it an opportunity for the moving party to present new arguments that were not in its original submissions.

III. ANALYSIS

A. Alleged Factual Misrepresentation

Petitioner alleges that our Decision is based on a factual misapprehension. Req. Reh’g 1, 4, 8–11. Specifically, Petitioner argues that the Board concluded that “Armani [] fails to disclose determining a spatial location of the nucleic acids within a tissue sample because the sample itself is lysed and therefore fails to retain the spatial information of the sample nucleic acids within the tissue sample.” Decision at 24. This is a simple misapprehension of Armani, as there is no dispute that Armani discloses techniques that determine the spatial location of a nucleic acid in a tissue sample. The Board’s characterization of Armani is contradicted

by the specification of the '022 patent itself, which observed that “Certain PCR assays in a 2D format *preserve spatial information (see Armani, et al., Lab on a Chip, 9(24): 3526-34 (2009)).*” EX1001 at 1:50–56; Pet. at 62.

Req. Reh’g 1, 9.

We disagree that we misapprehended Armani’s teachings. As Patent Owner correctly identifies, Petitioner misquotes our analysis at page 24 of the Decision. Response 9–10. We did not conclude that “Armani [] fails to disclose determining a spatial location of the nucleic acids within a tissue sample.” Rather, we concluded that

the *combination of Cantor and Armani likewise* fails to disclose determining a spatial location of the nucleic acids within a tissue because the sample itself is lysed and therefore fails to retain the spatial information of the sample nucleic acids within the tissue sample.

Dec. 24 (emphasis added). That distinction is critical, because, in its Petition, Petitioner relies on Cantor for the claim element of “using the coding identifier to identify the location where the binding agent interacted with the biological molecule.” Pet. 32–42; Ex. 1001, 32:46–63 (claim 1). To that point, in our Decision, we determined that “Cantor provides no teaching [] regarding how to use a tissue sample with the probes and methods described in Cantor to identify where the target nucleic acids of Cantor were spatially located within the tissue sample itself.” Dec. 22.

In its Petition, Petitioner does not rely on Armani in Ground 2 to cure that deficiency of Cantor. Rather, Petitioner relies on Armani for its disclosure of the 2D mapping of target DNA in tissue sections by tracking the placement of tissue section subregions into a multi-well array device. Pet. 50–51; Ex. 1100 ¶ 238. Petitioner further relies on Armani as motivation for conducting spatial analysis. *Id.* at 52; *see also* Ex. 1100 ¶ 81

(“Armani noted a desire and motivation in the art to study nucleic acids in a manner that maintained the spatial organization of the tissue.”).

In our Decision, however, we determined that Petitioner’s reliance on Armani does not cure Cantor’s deficient disclosure. Dec. 20–22. More specifically, we agreed with Patent Owner that “Cantor says nothing about placing beads in a ‘known location’ on a substrate because Cantor’s beads contact a sample nucleic acid, which itself has no spatial information.” Dec. 24 (quoting Prelim. Resp. 24). And we further agreed with Patent Owner that

Ground 2 still suffers from the same critical flaws as Ground 1: because the target nucleic acids are non-uniformly distributed in the tissue sample and the probes of Cantor’s bead collections are not repeated, hybridization will only happen by chance (or not at all) and the spatial location of the biological molecule cannot be determined. [Prelim Resp.] §VII.B.2; *see also* EX. 2002, ¶179. Dec. 24–25 (quoting Prelim. Resp. 77).

On rehearing, we are not persuaded that those determinations are based on a misapprehension of Armani. Because Armani is not relied upon by Petitioner for the feature of using a coding identifier to identify the location where a binding agent interacts with the biological molecule (*see* Pet. 50–52), which we determined to be absent in Cantor, Armani cannot cure that deficiency of Cantor.

B. Petitioner’s Remaining allegations

We agree with Patent Owner that Petitioner’s remaining allegations directly flow[] from Petitioner’s misquotation and mischaracterization of the Board’s actual factual findings about the **combination** of Cantor and Armani. *See* [e.g., Req. Reh’g], 11 (arguing that “[t]h [sic.] The Board’s factual misapprehension of Armani was further compounded by the Board’s implicit claim construction.”)

Response 12. Accordingly, we do not find persuasive Petitioner’s arguments that we committed legal error “by carrying out an implicit claim construction to add additional limitations not found in the claims” or by “failing to consider the prior art as modified and presented in the Petition in its obviousness analysis.” Req. Reh’g. 4, 11–15. Moreover, to the extent that Petitioner merely reargues its case or expresses disagreement with our Decision (*see, e.g., id.* at 11–15), we do not find those arguments persuasive because they do not satisfy the standards for assessing requests for rehearing of institution decisions under 37 C.F.R. §§ 42.71(c) and (d).

IV. CONCLUSION

On rehearing, we see no error in our findings of fact or conclusions of law. For the reasons given, Petitioner has not demonstrated that we abused our discretion in denying institution of a *inter partes* review of claims 1–7, 11–15, 17, 19, and 27–29 of the ’022 patent.

V. ORDER

Accordingly, it is

ORDERED that Petitioner’s Request for Rehearing is *denied*.

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For PETITIONER:

Andrew E. Krause
Abigail Sellers
Henry White
IRELL & MANELLA LLP
akrause@irell.com
asellers@irell.com
hwhite@irell.com

For PATENT OWNER:

Anita L. Meiklejohn
Michael J. Kane
Katie E. Hyma
Tiffany A. Reiter
Kristi L. R. Sawert
FISH & RICHARDSON P.C.
meiklejohn@fr.com
kane@fr.com
hyma@fr.com
reiter@fr.com
PTABInbound@fr.com

Kiley A. White
Paul Ehrlich
TENSEGRITY LAW GROUP
kiley.white@tensgritylawgroup.com
paul.ehrlich@tensgritylawgoup.com