

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BIO-RAD LABORATORIES, INC.,
Petitioner,

v.

CALIFORNIA INSTITUTE OF TECHNOLOGY,
Patent Owner.

IPR2024-01177
U.S. PATENT NO. 10,068,051

PETITIONER'S PRE-INSTITUTION REPLY AUTHORIZED PURSUANT TO
NOVEMBER 11, 2024 EMAIL

TABLE OF CONTENTS

	Page
I. SAXONOV IS PRIOR ART	1
II. <i>FINTIV</i> CONSIDERATIONS DO NOT DISFAVOR INSTITUTION.....	5

I. SAXONOV IS PRIOR ART

Patent Owner contends that institution should be denied because the Petition does not sufficiently show that the cited material from Saxonov was “carried forward” from the ’013 provisional. *See* Paper 6 at 35-39. Yet, outside of a handful of paragraphs—which are addressed in detail below—the ’013 provisional and Saxonov are *identical*, as confirmed by Patent Owner’s own expert and redline comparison. *See* EX2001 ¶¶ 45-46; EX2007. As this tribunal has held, and as commonsense would suggest, the “carried forward” “requirement is often established if the relied upon disclosures in the reference patent application appear in substantially the same form in the provisional application.” *Illumina, Inc. v. Ravgen*, IPR2021-01271, Paper 12 at 45 (PTAB Jan. 26, 2022). That is the case here and ought to put an end to the question of whether Saxonov was sufficiently shown to be prior art at the institution phase.

Nevertheless, the Petition includes countless belt-and-suspender citations to the ’013 provisional that further prove up the “carried forward” requirement. Indeed, there is only one claim element for which Patent Owner even contends a citation specifically to the provisional is missing. *See* Paper 6 at 39. Yet, for this one element, the Petition cross-references Section X.A.11. *See* Petition at 45. That section has six different citations to the ’013 provisional. *See id.* at 43. Thus, for every element, the Petition has not just citations to material in Saxonov that is

duplicated in the '013 provisional but also added concurrent citations specifically to the provisional. This is more than enough for institution. Any contention to the contrary would be an improper “formulistic approach divorced from the merits.” *See, e.g., Mastercard, Inc. v. OV Loop, Inc.*, IPR2023-1289, Paper 15 at 18-19 (PTAB March 20, 2024).

To the extent Patent Owner contends there is any material from Saxonov that is cited in the Petition but not actually present verbatim in the '013 provisional, this material is limited solely to Figures 9-10 and ¶¶ 17-18, 37, 76-79. *See* Paper No. 6 at 18, 41-42; EX2001 ¶ 48. Patent Owner’s arguments about this material do not defeat institution. Where the Petition cites this material, it also cites other disclosure that is in **both** Saxonov and the '013 Provisional and that is sufficient to support the invalidity ground on its own. None of the disputed material at Figures 9-10 and ¶¶ 17-18, 37, 76-79 is truly essential. And, even if it were, the Petition confirms that it was carried forward, citing specific supporting disclosure from the '013 provisional, as documented immediately below.

Figure 10 and ¶¶ 18, 76-79 all pertain to Example 4 of Saxonov, where three targets are detected using just two colors, a scenario that yields eight distinct populations of droplets.¹ All of this is present in passages from the '013 provisional

¹ As set forth in ¶ 78 of Saxonov, the eight populations of droplets are: (1) no targets,

that are specifically called out in the Petition in connection with one or more of Figure 10 or ¶¶ 18, 76-79. For instance, as explained in the Petition—and as confirmed by Petitioner’s expert—the ’013 provisional teaches detecting more targets than there are colors on page 9. *See* Petition at 57; EX1002 ¶ 90. The Petition likewise repeatedly cites Fig. 5, 17:4-19:23, and 2:15-3:3 of the ’013 provisional, which similarly describe detecting “two or more targets in a single partition,” including by using only a single color channel. *See* Petition at 31, 41, 43, 46-47. As to the eight populations of droplets described in Figures 10 and ¶ 78, the ’013 provisional at 5:19-6:3, discloses precisely this, teaching assays that can be “extended” and explaining that such an assay for three targets generates “eight clusters or populations of data, separated by intensity,” just as in Figure 10. *See* Petition at 32, 38, 44, 64-65. This passage from the provisional is cited nine times in support of the grounds for claim 1. *See id.* at 32, 40, 42-44, 46-47. Dr. Batt further explains that Saxonov ¶ 41 includes three tables, one of which lays out how three targets will yield eight distinct “Populations” of droplets. *See* EX1002 ¶¶ 152-54.

(2) T1+, (3) T2+ (4) T3+, (5) T1+/T2+, (6) T1+/T3+, (7) T2+/T3+, and (8) T1+/T2+/T3+. Saxonov notes in ¶ 78 that the latter four populations exist but are not shown in Figure 10 “to simplify the presentation.” *See* EX1004 ¶ 78.

In essence, this table is Figure 10 of Saxonov in tabular form. It appears verbatim in the '013 provisional at 9:4-10:3 and is cited in the Petition at pages 41 and 43. The Petition thus cites extensive support in the '013 provisional for Figure 10 and ¶¶ 18, 76-79 of Saxonov.

As to Figure 9 and ¶¶ 17, 77 of Saxonov, this is cited in the Petition for the non-controversial proposition that every probe will correspond to a particular target and that there can be multiple targets in a droplet. *See* Petition at 35, 41, 46-47. Again, there is supporting disclosure from the '013 provisional that is cited in the Petition. *See, e.g., id.* at 35 (citing '013 provisional at 13:14-17, which refers to multiple “targets” and their “corresponding probes”); *id.* at 41 (citing '013 provisional at 6:21-7:10, which describes combining the sample with primers that include reporters that may be a “probe”); *id.* at 46-47 (citing '013 provisional at *inter alia* 2:15-3:3 and 4:17-20, which describes detecting “two or more targets within each partition” and “two or more targets” in the “same channel”).

Finally, Saxonov ¶ 37, which is hardly cited in the Petition, is referred to merely for routine disclosure about detecting fluorophores in color channels. *See* Petition at 39. The Petition cites disclosure in the '013 provisional that teaches the exact same thing. *See id.* at 40 (citing *inter alia* '013 provisional at 17:4-19:9 and 5:19-6:3, which describes optical channels for detecting fluorophore intensity data).

Patent Owner's arguments that certain material from the '013 provisional was

not carried forward to Saxonov are without merit and based on the erroneous view that such support must be *in haec verba*. See, e.g., *Hormel Foods Corp. v. HIP, Inc.*, IPR2019-00469, Paper 9 at 16-17 (PTAB July 15, 2019). Likewise, any contention that Petitioner needed to provide detailed explanation of the provisional citations is similarly without merit. See *Mastercard*, Paper 15 at 18-19 (“We disagree with Patent Owner’s assertion that Petitioner had an obligation to provide, at this stage of the proceeding, an ‘explanation as to how the ’095 Provisional supports the subject matter relied upon in Collinge’ beyond the support identified in the Petition.”).

II. *FINTIV* CONSIDERATIONS DO NOT DISFAVOR INSTITUTION

At the time of the Petition, the parallel district court proceedings were in their earliest stages and there was no trial date. Since that time, the progress of the district court proceedings has only been stalled further. In August 2024, the case was reassigned to a new judge and the schedule was vacated, including the deadlines for claim construction. While a claim construction hearing is now scheduled for December 12, the parties disagree on how the case ought to be handled afterwards, see EX2080, and the Court has not set a full schedule, let alone a trial date. See EX1039. Nor have the parties made any progress in discovery. The parties have made only modest document products, and not a single deposition has been scheduled. Given how little progress there has been in the district court and the lack of a trial date, *Fintiv* considerations do not support denial of institution.

Dated: November 25, 2024

Respectfully submitted,

/Derek C. Walter/

Derek C. Walter

Lead Counsel for Petitioner

Reg. No. 74,656

Weil, Gotshal & Manges LLP

201 Redwood Shores Parkway

Redwood Shores, CA 94065

derek.walter@weil.com

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of **PETITIONER'S PRE-INSTITUTION REPLY AUTHORIZED PURSUANT TO NOVEMBER 11, 2024 EMAIL** as being served on November 25, 2024, via email pursuant to 37 C.F.R. § 42.6(e) to counsel for Patent Owner at the address below:

Jesse A. Salen, Reg. No. 72,209
SHEPPARD, MULLIN,
RICHTER & HAMPTON LLP
California Institute of Technology
12275 El Camino Real, Suite 100
San Diego, CA 92130
Tel: (858) 720-8900
Fax: (858) 509-3691
jsalen@sheppardmullin.com

Dated: November 25, 2024

By: /Derek C. Walter/
Derek C. Walter
Lead Counsel for Petitioner
Reg. No. 74,656