

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

Case No. IPR2024-01451

U.S. Patent No. 11,827,921 B2

**PATENT OWNER'S MOTION TO STRIKE PORTIONS OF PETITIONER'S
REPLY PURSUANT TO 37 C.F.R. § 42.23(b)**

Mail Stop "PATENT BOARD"
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION.....	1
II. BACKGROUND.....	1
III. LEGAL STANDARD	4
IV. ARGUMENT	4
A. The Reply’s Discussion of Larson FIG. 11a and ¶¶130–31 Should Be Stricken.....	4
B. The Reply’s Discussion of Saxonov ¶¶20 and 41 and FIG. 4 and the Corresponding Portions of the Provisional Should Be Stricken	9
C. The Reply’s Discussion of Struhl’s Testimony Should Be Stricken	10
V. CONCLUSION	10

TABLE OF AUTHORITIES

	Page(s)
<u>Cases</u>	
<i>Apple Inc. v. e-Watch, Inc.</i> IPR2015-00412, Paper 50, 44 (PTAB May 6, 2016)	8
<i>Ariosa Diagnostics v. Verinata Health, Inc.</i> 805 F.3d 1359 (Fed. Cir. 2015)	7, 8
<i>Arista Networks, Inc. v. Cisco Systems</i> 2016 IPR-00308, Paper 42 (May 25, 2017)	5, 7
<i>Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.</i> 821 F.3d 1359 (Fed. Cir. 2016)	4, 5
<i>Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.</i> 853 F.3d 1272 (Fed. Cir. 2017)	10
<i>Yita LLC v. MacNeil IP LLC</i> 69 F.4th 1356 (Fed. Cir. 2023)	7
<u>Statutes</u>	
35 U.S.C. § 312(a)(3)	4
<u>Other Authorities</u>	
37 C.F.R. § 42.23(b)	4, 10

I. INTRODUCTION

Pursuant to the Board's October 17, 2025 authorization (Exhibit 3003), Patent Owner ("PO") hereby moves to strike portions of Petitioner's Reply (Paper 20) that improperly introduce new arguments and evidence based on:

(1) portions of Larson not previously argued, including Figure 11a and ¶¶130-31 (Paper 20 at 1-2, 15-16, 22);

(2) portions of Saxonov not previously argued, including FIG. 4 and ¶¶20 and 41 and corresponding matter in the Saxonov Provisional, 5:19–6:3, 9:14–15, 10:18–11:13, 15:12–17:3, and FIG. 4 (Paper 20 at 1, 18-22); and

(3) Dr. Struhl's testimony relating to the above-noted sections of Larson, Saxonov, and the Saxonov provisional (Paper 20 at 1-2, 15-16, 22).

Petitioner's new arguments and evidence are improper because Petitioner could have presented them in the Petition but chose not to, and they impermissibly shift Petitioner's position on Reply.

II. BACKGROUND

Petitioner's originally filed grounds presented in its IPR Petition were primarily based on Larson (EX1017) and Saxonov (EX1004). Petitioner expressly relied on specific embodiments in Larson or Saxonov as allegedly disclosing the detection of three targets using two colors. For Ground 1, Petitioner explained that "for purposes of the present petition, in paragraph 140, Larson describes detecting

three target polynucleotides using two colors.” Paper 1 at 24 (citing Larson ¶140); *see also* 25, 27, 28, 29, 30, 32, 33, 35, 38-39, 42–43. Petitioner predicated Ground 2 on this same embodiment of Larson’s ¶140 and its purported teaching of three analytes in two colors. *Id.* at 44–51. For Ground 3, Petitioner argued Larson alone or in view of Saxonov renders obvious detecting three targets in a single droplet using two colors, relying on Larson’s ¶¶ 121, 141 and FIG. 9C and Saxonov’s FIG. 10. *See, e.g., id.* at 53 (pointing to Ground 1 and adding “Larson teaches a coding scheme wherein one detects three targets using only two colors, as depicted in FIG. 9”), 54, 55, 56, 57, 58 (“Importantly, Saxonov’s Figure 10 teaches an approach to detecting three targets based on just two colors”), 60–61 (proffering motivation to combine Larson with Saxonov because both references purportedly teach “using a distinct color for each of two targets and a combination of two colors for a third target”), 62–65. Ground 4 is based on the same purported teachings. *Id.*, 66–67. However, as filed, ***none of Petition’s grounds*** relied on the embodiment of Larson’s ¶¶130–31 and FIG. 11a. Indeed, the Petition cited FIG. “11” just once, in a long string cite ostensibly supporting its Ground 1 argument that Larson teaches “analytes are amplified in the single sample volume.” *Id.* at 31–32; *id.* at 22–67.

The Board instituted IPR in March 2025. Paper 11. The institution decision did not cite or discuss Larson’s embodiment of ¶¶130–31 nor FIG. 11a (because the Petition did not rely on that embodiment), and the Board found Petitioner did not

demonstrate Saxonov's FIG. 10 and ¶¶18, 78–79 are prior art. Paper 11 at 28–29.

In its Response (Paper 17), PO argued, among other things, that Larson teaches *single-occupancy* droplets, relies on dilution such that “most often only a single target allele is ever present in any one droplet,” and excludes from analysis any multiple-occupancy droplets. *Id.* at 27–29. PO argued Larson's FIG. 9C is a single-occupancy embodiment and that Petitioner had ignored Larson's disclosure clearly demonstrating the same. *Id.* at 51–53. PO explained why Petitioner's disparate proffered reasons for modifying Larson, alone or in view of Saxonov, were irrational and inconsistent with what a POSA reasonably would have understood. *Id.* at 54–62. Because Petitioner did not raise them, PO's Response did not discuss Larson's ¶¶130–31 or FIG. 11a, responding instead to the arguments and evidence actually raised in the Petition—those in Larson's ¶¶140–41 and ¶121 and FIG. 9C. *See id.* at 41–54. PO did not discuss Saxonov in detail, let alone FIG. 4, instead noting that the Board found Petitioner failed to show the relied-upon portions of Saxonov constitute prior art. Paper 17 at 27 (citing Paper 11 at 28–29).

In its Reply (Paper 20), Petitioner argued for the first time that Larson's FIG. 11a and ¶¶130–31 and Saxonov's FIG. 4 and ¶¶20 and 41, and table teach “substantively identical” embodiments that purportedly motivate a POSA to combine the references without “hing[ing] on restricting Larson's disclosure to terminal dilution or reducing dilution altogether.” Paper 20 at 15–16 (citing EX1017, ¶¶130–

31 and FIG. 11a), 18–22 (citing same; EX1004, ¶¶20, 41, FIG. 4, and Saxonov Provisional); *id.* at 1–2, 22. Petitioner also shifted to arguing, based on these newly cited embodiments, that *dual*-occupancy droplets detected in one channel invalidate the claims, contrary to Petitioner's earlier reliance on embodiments purportedly disclosing triple-occupancy droplets detected in two channels. Paper 20 at 1–2, 15–16, 18–22; Paper 1 at 24, 25, 27, 28, 29, 30, 32, 33, 35, 38–39, 42–51, 53–58, 60–67.

III. LEGAL STANDARD

A “challenger [is] obliged to make an adequate case in its Petition and the Reply [is] limited to a true rebuttal role.” *Ariosa Diagnostics v. Verinata Health, Inc.*, 805 F.3d 1359, 1367 (Fed. Cir. 2015). Thus, petitioners must “adhere to the requirement that the initial petition identify ‘with particularity’ the ‘evidence that supports the grounds for the challenge to each claim.’” *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016) (quoting 35 U.S.C. § 312(a)(3)). Moreover, 37 C.F.R. §42.23(b) limits a petitioner's reply to responding only to arguments raised in the patent owner response. *See* PTAB Consolidated Trial Practice Guide November 2019 (“TPG”) at 74. A petitioner's reply that “crosses the line from the responsive to the new” risks being stricken. *Ariosa*, 805 F.3d at 1368.

IV. ARGUMENT

A. The Reply's Discussion of Larson FIG. 11a and ¶¶130–31 Should Be Stricken

Petitioner's attempt to rely on a new rationale for obviousness, predicated on

the new citations to Larson FIG. 11a and ¶¶ 130–31 (alone or combined with Saxonov's FIG. 4 and ¶¶20, 41) should be rejected because the Petition did not raise these arguments (but could have). Petitioner should not be allowed to take a position Petitioner now realizes it should have taken from the outset. “[T]he expedited nature of IPRs bring with it an obligation for petitioners to make their case in their petition to institute. While the Board’s requirements are strict ones, they are requirements of which petitioners are aware when they seek to institute an IPR.” *Intelligent Bio-Sys.*, 821 F.3d at 1369–70 (Board correctly refused to consider reply arguments “because [Petitioner] relied on an entirely new rationale”).

Arista Networks, Inc. v. Cisco Systems, Inc. is directly on point. IPR2016-00308, Paper 42 (PTAB May 25, 2017). There, the reply argued “that one of ordinary skill would understand use of a command line interface such as purportedly disclosed in SanDisk, to configure the AgentX process to generate registration requests.” *Id.* at 12–13 (quotation marks omitted). The patent owner moved to strike the petitioner’s reply argument for exceeding the proper scope of a reply by introducing positions not advanced in the petition. *Id.* at 12–13. While the Board noted the petition’s extensive discussion of both the SanDisk and AgentX references, the Board was “unable to discern Petitioner’s explanation of SanDisk’s CLI combined with AgentX to generate a new registration request in the cited pages of either the Petition or the Mohapatra declaration, or in any other portions of the

Petition or the Mohapatra declaration.” *Id.* at 13. The petitioner’s reply arguments had no basis in the petition, so the Board found they were “a new mapping of the claims to the prior art in light of the gaps that Patent Owner pointed out in its Response” and granted the motion to strike. *Id.* at 14–15.

Here, the Petition includes only a single, unexplained citation to Larson’s FIG. “11” that is part of a long string cite. Paper 1 at 32 (citing “EX1017 ¶¶ 2, 9, 11, 13, 14, 16, 17, 20, 47, 49, 91, 93, 119–121, 150, 195, Figs. 1-4, 7-11, 15.”).¹ And the Petition includes only passing citations to ¶¶130 and 131 to support arguments unrelated to those Petitioner now makes on reply. *Id.* at 42, 44, 50. Indeed, the Petition primarily relies upon the embodiments of Larson’s ¶¶121, 141 and FIG. 9C to argue that “Larson alone” teaches unambiguous detection of detecting **three** analytes in a droplet using **two** colors, and to argue that Larson in view of Saxonov teaches the same. Paper 1 at 54–57, 58–62. In response, PO argued Larson’s FIG. 9C embodiment is actually directed to **single**-occupancy droplets, and explained why Petitioner’s stated reasons for modifying Larson, alone or with Saxonov, were flawed and inconsistent with what a POSA reasonably would have understood from Larson. *Id.* at 27–62. Now, recognizing the gaps in its Petition regarding Larson and Saxonov, Petitioner relies on new arguments based on Larson’s FIG. 11a and ¶¶130–31 as purportedly teaching detecting **two** targets in a droplet in **one** channel and as

¹ Notably, there is no “FIG. 11” in Larson. Larson includes FIGS. 11a and 11b, so Petitioner’s cite to Fig. 11 is unclear.

supposedly being “substantively identical” to Saxonov’s FIG. 4 and ¶¶20, 41, which ostensibly motivates combining Larson and Saxonov. Paper 20 at 15, 20–22. This is a completely different embodiment than what the Petition relied on, and a wholly new and different theory of anticipation and obviousness raised for the first time at this late stage in the briefing. Paper 17 at 27–63.

As in *Arista*, Petitioner here included no arguments to raise or explain its newly articulated invalidity theory rooted in Larson’s FIG. 11a and ¶¶130–31 embodiment, let alone the newly raised purported motivations to combine Larson with Saxonov based on “similarities” between Larson’s FIG. 11a and Saxonov’s FIG. 4. *Arista*, IPR2016-00308, Paper 42 at 12–13; Paper 20 at 20 at 15, 20–22. In the Petition, Petitioner predicated all of its invalidity theories on Larson’s purported teachings of *triple*-occupancy. Paper 1 at 24–30, 53–57. Accordingly, those are the theories PO and Dr. Struhl responded to. EX2018, ¶¶93–95, 99, 103, 110–12, 117–19; *Arista*, IPR2016-00308, Paper 42 at 13–14; *see also Yita LLC v. MacNeil IP LLC*, 69 F.4th 1356, 1367 (Fed. Cir. 2023) (affirming Board decision to refuse to consider new reply arguments not sufficiently rooted in the Petition).

Ariosa Diagnostics v. Verinata Health, Inc., 805 F.3d 1359, 1367 (Fed. Cir. 2015) is also directly on point. There, the Federal Circuit affirmed the Board’s refusal to consider reply arguments that tried overcoming deficiencies in the petition regarding motivation to combine by relying on different embodiments from

“previously unidentified portions of a prior art reference[.]” *Id.* “The Board declined to consider those embodiments because the cited portions ... were not identified or discussed in the Petition or the accompanying Declarations.” *Id.* (quotation marks omitted). The Federal Circuit affirmed the Board’s judgment that the “Reply contention crosse[d] the line from the responsive to the new.” *Id.* at 1368.

The same is true here. Petitioner improperly introduces new evidence that it failed to meaningfully discuss in the Petition (if at all), where it could have but did not do so earlier. Petitioner is *also* attempting to shift its invalidity theory to an embodiment of Larson that it omitted and that differs from purported triple-occupancy, dual-channel embodiments of Larson (and Saxonov) discussed in the Petition. These attempts should be rejected. *Ariosa*, 805 F.3d at 1367–68 (rejecting evidence of alternative embodiments where cited portions of the reference were not discussed in the Petition); *Arista*, IPR2016-00308, Paper 42 at 13 (refusing to consider motivation to combine argument on reply because the Board could not find support for the new theory in the Petition); *Apple Inc. v. e-Watch, Inc.*, IPR2015-00412, Paper 50, 44 (PTAB May 6, 2016) (declining to consider reply arguments not discussed in Petition). As the TPG explains, “Petitioner may not submit new evidence or argument in reply that it could have presented earlier[.]” TPG at 73.

Just as the Board refused to consider new motivation-to-combine theories in *Arista* and new embodiments in *Ariosa*, the Board here should refuse to consider

Petitioner's new theories based on embodiments not argued in the Petition or PO's Response. Petitioner could have presented earlier arguments based on Larson's ¶¶130–31 and FIG. 11a in the Petition, but chose not to. Accordingly, all portions of the Reply relying on FIG. 11a and ¶¶130–31 of Larson should be stricken.

B. The Reply's Discussion of Saxonov ¶¶20 and 41 and FIG. 4 and the Corresponding Portions of the Provisional Should Be Stricken

Petitioner's Reply also newly relies on Saxonov's FIG. 4, ¶¶20 and 41, and corresponding portions of the Saxonov Provisional, and raises a new motivation-to-combine theory. Petitioner's approach should be seen for what it is, an eleventh-hour attempt to avoid the Board's finding (Paper 11 at 28–29) that Saxonov's FIG. 10 and ¶¶18, 78-79 relied upon in the Petitioner are not prior art. Paper 20 at 18-22. But Petitioner clearly "could have presented [this disclosure] earlier, e.g. to make out a *prima facie* case of unpatentability." TPG at 73. Thus, Petitioner should not be allowed to raise these new disclosures and theories for the first time in its Reply.

Indeed, the Petition cited the Saxonov Provisional's FIG. 4 only once, alleging it discloses "different intensity signals 108, 110, and 112" as supposedly supporting the proposition that "the '013 provisional discloses using probes labeled with the same color at different intensities to distinguish among different polynucleotide analytes (or combinations of polynucleotides)." Paper 1 at 14. Yet the Reply newly asserts this purported disclosure of Saxonov is "substantively identical to the one disclosed in Figure 11a of Larson," that this "direct correspondence powerfully

reinforces Dr. Batt's position that a POSA would have been clearly motivated to combine these teachings," and that "Larson already demonstrates the same methodology." Paper 20 at 18–22. Importantly, Petitioner may not substitute evidence or arguments to support a new invalidity theory on Reply. *Wasica Fin. GmbH v. Cont'l Auto. Sys., Inc.*, 853 F.3d 1272, 1286-87 (Fed. Cir. 2017) (rejecting shifting arguments by Petitioner where the Reply cited "a different passage of [the prior art]" to support a new theory of invalidity).

Because the Board found Petitioner failed to establish the relied-upon portions of Saxonov qualify as prior art, PO's Response did not discuss Saxonov ¶¶20, 41, or FIG. 4. Paper 17 at 27, 40, 63. Accordingly, Petitioner's reliance on new portions of Saxonov is not responsive to the PO Response and improperly exceeds the Response and should be stricken. 37 C.F.R. § 42.23(b).

C. The Reply's Discussion of Struhl's Testimony Should Be Stricken

For the same reasons as in Sections IV.A and IV.B, the Reply's discussion of Dr. Struhl's testimony related to the newly cited portions of Larson and Saxonov discussed above is improper and should be stricken.

V. CONCLUSION

For the reasons explained above, Patent Owner respectfully requests the Court strike the identified portions of Petitioner's Reply.

Respectfully submitted,

Dated: October 24, 2025

s/Jesse A. Salen

Jesse Salen (Reg. No. 72,209)
SHEPPARD, MULLIN, RICHTER &
HAMPTON LLP
12275 El Camino Real, Suite 100
San Diego, California 92130-4092
Tel.: (858) 720-8900
jsalen@sheppardmullin.com

Attorney for Patent Owner

CERTIFICATE OF SERVICE

I certify that the foregoing document was served in its entirety on Petitioner's
counsel of record as follows:

Derek C. Walter (lead counsel)
dwalter@jonesday.com
Jones Day
555 California Street, 26th Floor
San Francisco, CA 94104

Matthew Johnson (back-up counsel)
mwjohnson@jonesday.com
Jones Day
500 Grant Street, Suite 4500
Pittsburgh, PA 15219

Dated: October 24, 2025

s/Jesse A. Salen
Jesse Salen (Reg. No. 72,209)
Attorney for Patent Owner