

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICRON TECHNOLOGY, INC.,
Petitioner

v.

YANGTZE MEMORY TECHNOLOGIES COMPANY, LTD.,
Patent Owner

Case No.: IPR2024-00911

U.S. Patent No. 10,937,806

Title: THROUGH ARRAY CONTACT (TAC) FOR THREE-DIMENSIONAL MEMORY DEVICES

AUTHORIZED RESPONSE TO DIRECTOR REVIEW REQUEST

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
II. ARGUMENT	3
B. The Board Committed No Legal or Factual Error in Rejecting Ground 2.....	3
1. The Board did not require bodily incorporation	4
2. The Board did not erroneously disregard new reply arguments	6
3. The Board did not require evidence of anticipation	8
C. The Board Also Committed Neither Procedural nor Substantive Error in its Treatment of Ground 3	9
1. The Board did not improperly fail to consider Petitioner’s new Reply arguments.....	12
2. PO did not merely suggest operability problems; it established them.....	13
III. CONCLUSION.....	15

TABLE OF AUTHORITIES

	Page(s)
FEDERAL CASES	
<i>Apple Inc. v. Andrea Elecs. Corp.</i> , 949 F.3d 697 (Fed. Cir. 2020).....	13
<i>Belden Inc. v. Berk-Tek LLC</i> , 805 F.3d 1064 (Fed. Cir. 2015).....	8
<i>DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.</i> , 567 F.3d 1314 (Fed. Cir. 2009).....	15
<i>Elbrus Int'l Ltd. v. Samsung Elecs. Co.</i> , 738 F. App'x 694 (Fed. Cir. 2018)	6
<i>Idemitsu Kosan Co., Ltd. v. SFC Co. Ltd.</i> , 870 F.3d 1376 (Fed. Cir. 2017).....	7, 13
<i>Intel Corp. v. PACT XPP Schweiz AG</i> , No. 2022-1038, 2023 WL 2198649 (Fed. Cir. Feb. 24, 2023)	6
<i>Intel Corp. v. Qualcomm Inc.</i> , 21 F.4th 784 (Fed. Cir. 2021)	8, 9
<i>Intuitive Surgical, Inc. v. Ethicon LLC</i> , 25 F.4th 1035 (Fed. Cir. 2022)	4
<i>McGinley v. Franklin Sports, Inc.</i> , 262 F.3d 1339 (Fed. Cir. 2001).....	5
<i>Medtronic, Inc. v. Teleflex Innovations S.a.r.l.</i> , 70 F.4th 1331 (Fed. Cir. 2023)	7, 12, 13
<i>Rembrandt Diagnostics, LP v. Alere, Inc.</i> , 76 F.4th 1376 (Fed. Cir. 2023)	13
<i>Sanofi-Aventis Deutschland GmbH v. Mylan Pharms. Inc.</i> , 791 F. App'x 916 (Fed. Cir. 2019)	13
OTHER AUTHORITIES	
MPEP § 2143.02	14

I. INTRODUCTION

Petitioner's Request for Director Review of the Board's Final Written Decision ("Request") should be denied.¹ The Board's analysis of what Petitioner labels Grounds 2 and 3, was well-reasoned; grounded in the competing evidence; and consistent with applicable legal principles.² Petitioner's Request, in contrast, distorts the grounds and the Board's analysis, and alleges non-existent legal error. The Request should be denied.

Petitioner's distortions begin in the Request's Introduction. Contrary to Petitioner's assertion (-791 Request, 1), Ground 2 was not based on merely implementing Toyama's First Exemplary Structure in a multi-plane implementation. Instead, in a hindsight-driven attempt to recreate claim 8's requirement of a through array contact (TAC) region between first and second channel regions, Petitioner proposed a specific modification of Toyama: repeating the layout of Toyama's Fig. 17E in the lateral (hd1) direction. That was the proposed ground and that is what the Board analyzed. The problem with Petitioner's proposed ground was that it would render the device inoperable, because it would require removal of, or interfere with, interconnects and peripheral circuitry necessary for device operation. The presence of lateral interconnects and circuitry is precisely why Toyama disclosed replicating its layout only in the vertical (hd2) direction, and never in the lateral (hd1) direction. -791 FWD, 34. The Petition overlooked that necessary circuitry, or purposefully ignored it in an attempt to recreate the claim limitation mentioned above. Either way, the Board properly weighed the evidence and rejected the ground.

¹ Petitioner filed a substantively identical Request for Director Review in proceeding IPR2024-00791, which challenges other claims of the '806 Patent. PO is concurrently filing an Authorized Response to Director Review Request in that IPR that makes substantively identical arguments to those made in this Response.

²The Board referred to what Petitioner calls Grounds 2 and 3 as Alternative Arguments 2 and 3. Petitioner does not challenge the Board's determination of Ground 1/Alternative Argument 1.

None of Petitioner's assertions of error has merit. First, the Board did not require bodily incorporation; it correctly analyzed the Petition ground, which was repetition of Toyama's Fig. 17E in the lateral direction. It was that specific modification that Petitioner failed to show a POSITA would have been motivated to make. Second, the Board did not improperly refuse to consider new arguments made for the first time in Reply. To the contrary, the Board expressly considered them and rejected them as lacking. But the Board would have been justified had it chosen not to address them, as those arguments required modifying Fig. 17E's layout before repeating that modified layout laterally, which was a new ground not presented in the Petition. Third, the Board did not require evidence of anticipation. Instead, the Board correctly found that Micron's evidence of generic multi-plane memory being known, did not supply sufficient motivation for modifying Toyama's specific layout in the specific manner proposed.

Petitioner's arguments about Ground 3 fare no better. In Ground 3, Petitioner proposed adding a large block of dielectric material in a key region of the memory device, which the Board found introduced significant problems. In an attempt to remedy those problems, Petitioner's Reply proposed making yet further modifications to Toyama—modifications never shown to be desirable on their own, but that instead were necessitated by the original modification that Petitioner proposed. That further modifications were needed disproved Petitioner's theory that its original modification (adding a large dielectric block where none existed) was a mere "simple substitution" of known elements, defeating any allegation of motivation. Petitioner again contends that the Board improperly failed to consider Petitioner's Reply arguments, but again that is false: the Board considered them and found them to support PO's position and undercut Petitioner's. Petitioner also mischaracterizes the FWD as identifying only "potential" problems with the proposed combination, when instead it credited PO's detailed

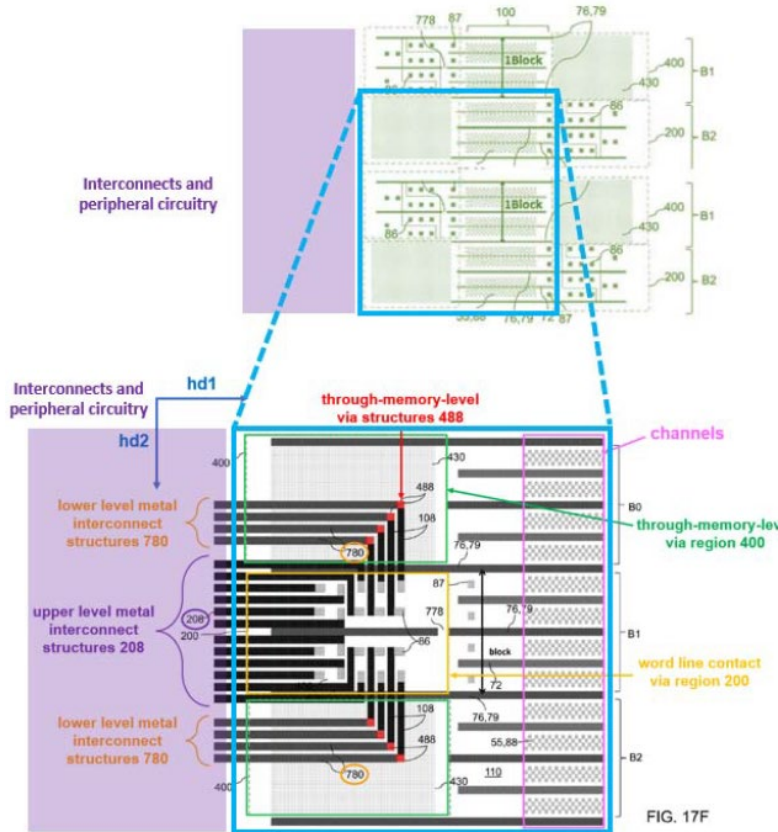
evidence about actual, significant problems that arose from Petitioner’s proposed combination. The Board’s decision was amply supported and should not be disturbed.

II. ARGUMENT

B. The Board Committed No Legal or Factual Error in Rejecting Ground 2

The Board analyzed the parties’ evidence and applied well-settled legal principles in determining that Petitioner failed to carry its burden of showing that a POSITA would have modified Toyama to replicate its Figure 17E layout in the lateral direction. The Board noted that Petitioner admitted that Toyama did not disclose the claimed TAC region formed between first and second channel regions. -791 FWD, 31. Instead, Toyama discloses an alleged TAC region outside of and next to the alleged channel regions—the opposite of what is claimed. *E.g.*, -791 Ex. 2010, 26-28. Thus, Petitioner’s hindsight-driven modification of Toyama was to propose repeating the layout of Fig. 17E in the lateral (hd1) direction. -791 Pet., 68; -791 FWD, 27, 34-35. By doing so, one would allegedly arrive at the claimed TAC region between two channel regions.

But the problem with Petitioner’s proposed modification is that it ignored important and necessary interconnects and peripheral circuitry in Fig. 17E’s lateral (hd1) direction, where the Petition had proposed adding additional layouts. -791 FWD, 32-34; -791 POR, 30-35. That circuitry is necessary for the operation of the device. -791 POR, 31. The following annotated figure shows the locations of those interconnects and peripheral circuitry relative to Fig. 17E’s “layouts” on which the Petition relied:



-791 POR, 32; -791 FWD, 33. Petitioner utterly failed to address that portion of Fig. 17E's layout and its impact on the proposed modification.

The Board analyzed the arguments and evidence and concluded: "Patent Owner persuasively explains, with supporting testimony by Dr. Yang, that these regions containing the interconnects and peripheral circuitry would prevent repeating the layout in the hd1 direction because the interconnects and peripheral circuitry would be located in the same region that Petitioner proposes adding the additional memory plane." -791 FWD, 34.

1. The Board did not require bodily incorporation

Contrary to Petitioner's lead argument, the Board did not impermissibly require bodily incorporation. (-791 Request, 6-7). Rather, the Board analyzed the specific modification proposed in Ground 2. After all, Petitioner was the "master of its own petition." *Intuitive*

Surgical, Inc. v. Ethicon LLC, 25 F.4th 1035, 1041 (Fed. Cir. 2022). The specific modification Petitioner proposed was to “repeat the layout shown in Fig. 17E” in the lateral (hd1) direction. -791 Pet., 69. And, to be sure, the proposed modification was not to repeat a modification of Fig. 17E’s layout; it was, as Petitioner’s expert explained, to repeat individual planes “fabricated in exactly the same way as in Toyama’s first exemplary structure.” -791 Ex. 1043, ¶ 32. Thus, the Board considered whether that layout could be so repeated, and whether a POSITA would have been motivated to do so.

There is no dispute that Fig. 17E’s layout includes necessary interconnects and circuitry on the lateral side of the layout. Thus, when the Board analyzed the proposed modification of repeating Fig. 17E’s layout, it had to consider those structures. Again, Petitioner did not argue for combining a modified version of Fig. 17E’s layout. Petitioner either overlooked that part of the layout or simply ignored it. Either way, as the Board found, the presence of those structures prevents replication of Fig. 17E’s memory device in the lateral direction (hence Toyama discloses repeating the layout only in the vertical hd2 direction), and defeats any supposed motivation to make Petitioner’s proposed modification. -791 FWD, 32–34. The Board’s decision is consistent with the longstanding principles that “[i]f references taken in combination would produce a ‘seemingly inoperative device,’”—as is the case here, -791 POR, 33–35—“such references teach away from the combination and thus cannot serve as predicates for a prima facie case of obviousness.” *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1354 (Fed. Cir. 2001) (citations omitted).

The Board’s analysis did not require bodily incorporation and Petitioner’s cited cases are inapposite. -791 Request, 6–7. Petitioner’s proposed ground was not to take the teaching of one reference and apply it to another, as was the issue in the bodily incorporation cases it cites. *Cf.*

Elbrus Int'l Ltd. v. Samsung Elecs. Co., 738 F. App'x 694, 698 (Fed. Cir. 2018) (holding that where the proposed ground was to apply a teaching about voltage levels from one reference to another, it was irrelevant whether the particular features of the secondary reference could be bodily incorporated into the primary reference); *Intel Corp. v. PACT XPP Schweiz AG*, No. 2022-1038, 2023 WL 2198649, at *2-3 (Fed. Cir. Feb. 24, 2023) (holding that where petitioner relied on secondary reference's teaching of caches operation in a specific mode, it was error to require bodily incorporation of the shared bus into the primary reference). Rather, Petitioner's ground was to replicate a particular structure in a particular direction. None of Petitioner's cases addresses that scenario, and Petitioner, as "master of its petition," cannot now back away from the ground it proposed.

2. The Board did not erroneously disregard new reply arguments

Petitioner argues that the Board erred in failing to consider Petitioner's new arguments made in Reply. -791 Request, 7. While the Board did state that those new arguments were unpersuasive because they were not raised in the Petition, -791 FWD, 35, the Board nevertheless proceeded to consider them on the merits in detailed analysis, and found them wanting, -791 FWD, 36–37. It is not the case, then, that the Board disregarded those arguments, which renders the entirety of Petitioner's argument on this point irrelevant.

Nevertheless, had the Board declined to consider those new arguments at all, it would have been justified in doing so. In an attempt to remedy the fatal problem with the Petition's proposed modification, Petitioner argued in Reply that a POSITA could have *altered* the layout of Fig. 17E by removing the lateral interconnects and circuitry and placing them somewhere else. -791 Reply, 18; -791 FWD, 35. Whereas the Petition had proposed repeating Fig. 17E's layout exactly, the Reply introduced an entirely new ground based on first modifying the layout of Fig. 17E (by removing and placing elsewhere the lateral interconnects and circuitry) and then

repeating that modified layout. That is precisely the type of new argument the Board has the discretion to reject. *Medtronic, Inc. v. Teleflex Innovations S.a.r.l.*, 70 F.4th 1331, 1347 (Fed. Cir. 2023) (“The Board did not err in discounting modifications not presented in Medtronic’s petition It was within the Board’s discretion not to consider these untimely raised modifications.”).³

The Board was also correct in determining that, on the merits, Petitioner’s new argument that Fig. 17E’s lateral interconnects and circuitry could be removed and placed somewhere else, failed to render obvious claim 8. As the Board noted, Petitioner’s “generalized assertions” that a POSITA could have rerouted that circuitry “are insufficient to show how a POSITA would have rerouted the peripheral circuitry” to allow repetition “in the hd1 direction or that a POSITA would have been motivated to do so.” -791 FWD, 36–37. This is particularly so where Petitioner’s late assertions that interconnects can be placed under, alongside, or above the array (-791 Reply, 18) failed to address Toyama’s disclosures of interconnects and circuits *already* under, alongside, and above the arrays, leaving no room for Petitioner’s new modifications. *See* -791 POSR, 22-23. Similarly, the generic fact that flash devices having multiple planes were known was insufficient to show that a POSITA would have created a multiplane device by replicating the particular layout of Toyama Fig. 17E and repeating it in the lateral direction. -791 FWD, 36–37. That is particularly true when Toyama already discloses creating a multiplane device through repeating the layout in the hd2 direction. -791 FWD, 34, 37. Thus, Toyama already had a solution for providing a multiplane device. And none of Petitioner’s cited evidence concerned a device similar to Fig. 17E. -791 FWD, 37.

³ *Idemitsu Kosan Co., Ltd. v. SFC Co. Ltd.*, 870 F.3d 1376 (Fed. Cir. 2017), which Petitioner discussed at length, is inapposite. -791 Request, 9-10. That case did not concern a Petitioner proposing in its Reply a further modification not present in its Petition.

The Board’s finding that Petitioner’s generic evidence was insufficient to show that a POSITA would have made the specific modification proposed is well grounded in law. *See, e.g., Intel Corp. v. Qualcomm Inc.*, 21 F.4th 784, 797 (Fed. Cir. 2021) (“[G]eneric” or “conclusory” analysis is insufficient when it bears “‘no relation to any specific combination of prior art elements . . . from specific references’ and [does]n’t explain why a skilled artisan would have combined them ‘in the way the claimed invention does.’”) (citations omitted).

3. The Board did not require evidence of anticipation

Petitioner’s argument that the Board required evidence of anticipation is also wrong, and ignores what it means to anticipate.

First, Petitioner complains that the Board held that it was not enough to show that a POSITA “could” have made the proposed modification. -791 Request, 10. But it is well-settled that “obviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention.” *See Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015). Thus, whether a POSITA *could* have repeated Fig. 17E’s layout in the lateral direction by first modifying that layout to remove and rebuild the lateral circuitry and interconnects elsewhere (which was not the ground presented in the Petition), does not answer the key question of whether a POSITA would have done so. No evidence showed that a POSITA would have.

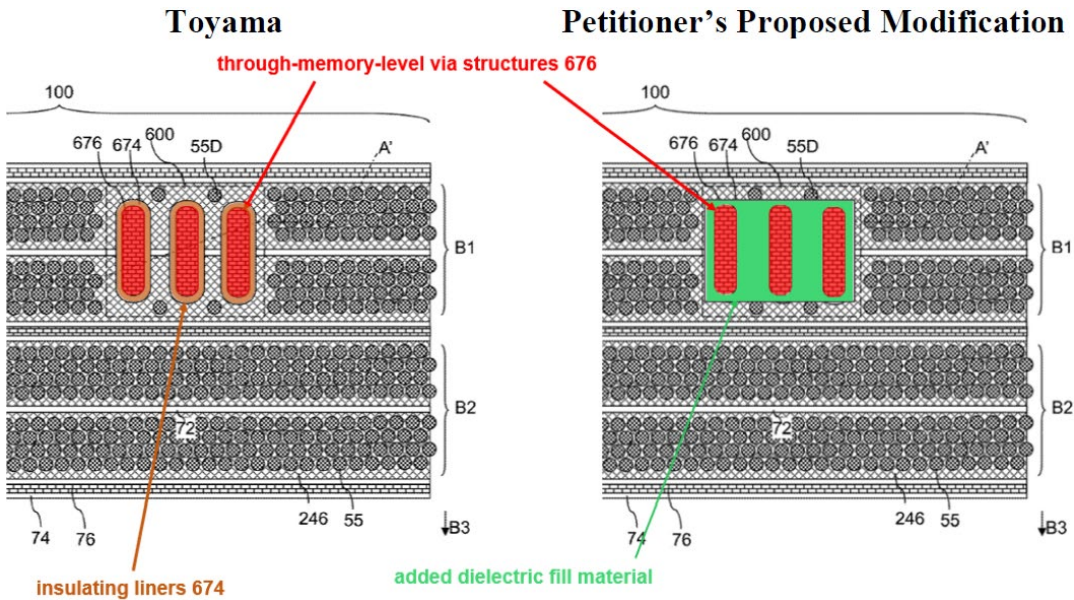
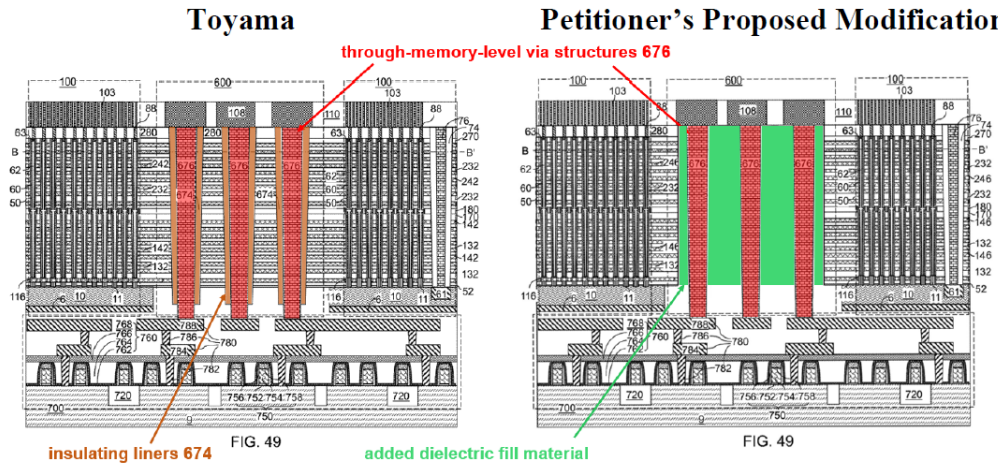
Second, Petitioner complains that the Board faulted it for adducing no evidence that it was known to start with a NAND device similar to that of Toyama Fig. 17E and implement that type of device in multiple lateral planes. -791 Request, 10–11; -791 FWD, 36–37. That was no error. As noted above, generic or conclusory analysis (for example, that devices with multiple planes were known), does not show that a POSITA would have been motivated to make a specific modification (for example, to repeat Fig. 17E in the hdl direction, especially when

doing so interferes with lateral circuitry). *Intel*, 21 F.4th at 797. And searching for evidence that would support the specific combination proposed did not turn an obviousness inquiry into a search for anticipation, as Petitioner argues. -791 Request, 11. The Board did not fault Petitioner for failing to come forth with a reference that disclosed all claim limitations, which is what is required for anticipation. Rather, it faulted Petitioner for supplying only generic evidence of multiplane devices, which was inadequate to show a reasoned, evidence-supported rationale for a POSITA being motivated to repeat the layout of Toyama Fig. 17E in the hd1 direction, which was the Petition's proposed modification.

C. The Board Also Committed Neither Procedural nor Substantive Error in its Treatment of Ground 3

Petitioner repeats many of the same groundless arguments regarding Ground 3 that it made for Ground 2. Its arguments fail for similar reasons.

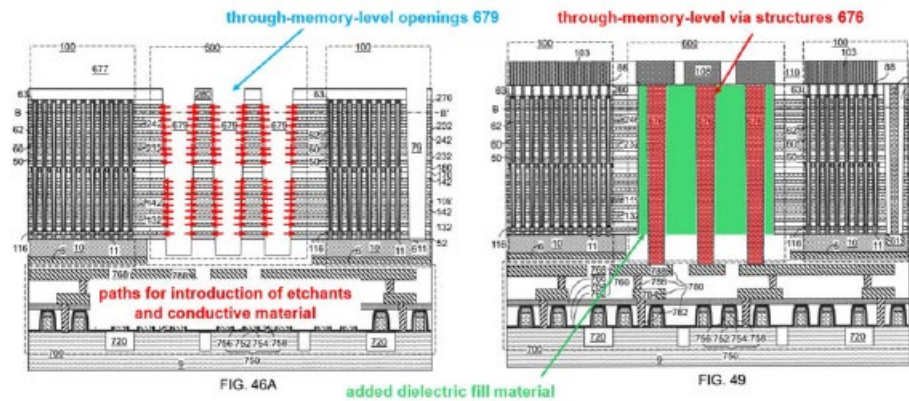
In addition to the limitation discussed above with respect to Ground 2, claim 8 requires a plurality of through array contacts (TACs) extending vertically through a dielectric structure. -791 FWD, 6 (element labeled [8.G.iii]). Toyama does not disclose that feature. In the hope of overcoming that deficiency, Petitioner proposed modifying Toyama's Second Modification by replacing the thin, physically separated insulating liners (shown in orange below) around each TAC (shown in red), with a large, unitary dielectric structure (shown in green) that envelopes the plurality of TACs and replaces large portions of the memory array. By doing so, Petitioner's modification removes large portions of the memory's alternating stack of dielectric and conductive layers (*i.e.*, the horizontal lines in the top left figure below, which are no longer present in the top right figure below in the location where the green dielectric block would be in Petitioner's imagined modification). The proposed modification is shown in the following annotated figures, which are alternative views of Toyama's Second Modification (Fig. 49 top, Fig. 48B bottom):



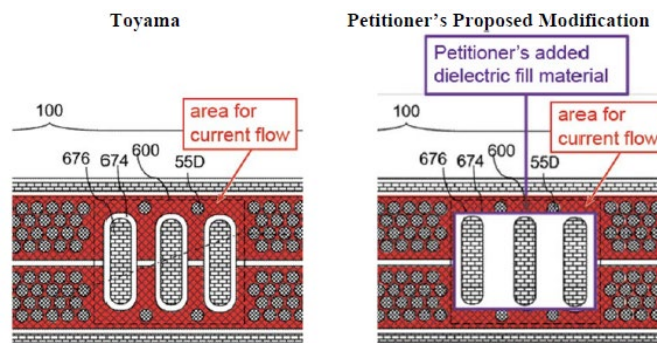
See -791 POR, 39; -791 FWD, 39.

As the Board found, Petitioner's proposed modification suffered from two fatal problems. First, sacrificial layers 142, 242 of the alternating stack are used in Toyama to deposit conductive materials during the gate replacement process (necessary for forming the memory array), and "the replacement of the sacrificial layers with the unitary dielectric fill materials prevents this process." -791 FWD, 43; -791 POR, 37–41. The following illustrations show the problem, with

Toyama's unmodified disclosure on the left and the proposed modification on the right (*see* -791 POR, 41):



Second, the proposed modification “removes large portions of the conductive layers in the array region that form word lines used to transmit signals for controlling memory and replaces them with the insulating block.” -791 FWD, 43. That in turn causes serious degradation in performance, significantly restricting current flow, and making Toyama’s device unable to work for its intended purpose. -791 POR, 43. The problem is seen in the following annotated illustration of Petitioner’s proposed modification (*see* -791 POR, 42):



Given the significant problems illustrated above, it is no surprise that while Toyama teaches more than a dozen embodiments with various configurations of elements, none teaches forming a unitary dielectric block in the memory array region between two channel regions, because doing so eliminates the conductive material in the word lines. *See* -791 POR, 45.

1. The Board did not improperly fail to consider Petitioner’s new Reply arguments

Petitioner’s main argument here is that the Board improperly “declined to consider *any* of the arguments or evidence Micron provided in reply because it had not been ‘set forth in the petition,’” but that is false. -791 Request, 13 (quoting -791 FWD, 45).

First, Petitioner omits the Board’s full sentence, which was: “Arguments set forth in the Reply, namely that a POSITA would have known how to further modify the Second Modification so as to perform the functions of the removed alternative stack layers and conductive layers, were not set forth in the Petition *and support our determination that the Petition failed to show that the modification results in a simple substitution of one known element for another to achieve a known result.*” -791 FWD, 45 (emphasis added). Far from declining to consider the Reply’s arguments or evidence, the Board did consider them and found them to support *PO*’s arguments. -791 FWD, 45. As the Board noted, Petitioner’s rationale for its proposed modification was that it involved the simple substitution of one known element for another. -791 FWD, 44. Yet the Reply set forth *further* modifications of Toyama’s structures and processes in order to address the problems introduced by the unitary block of dielectric in Petitioner’s proposed modification. That further modifications were needed disproved Petitioner’s simple substitution theory. Moreover, the Board also addressed Petitioner’s Reply arguments in detail elsewhere, finding them unpersuasive. *See* -791 FWD, 46.

Even if the Board had chosen not to consider Petitioner’s reply arguments, that would have been proper. *Medtronic* explains why. In *Medtronic*, the Petitioner asserted obviousness grounds based on replacing the Kontos reference’s funnel. 70 F.4th at 1346–47. Patent Owner responded that such a replacement would cause the modified system to no longer invalidate, as Kontos’ protruding marker band would cause the size difference between two catheters to exceed a

threshold recited in the claim. *See id.* Petitioner argued in reply that a POSITA “could account for that gap by making additional modifications not proposed in its petition, including by recessing Kontos’ marker band.” *Id.* The Federal Circuit affirmed the Board’s holding of failure to show obviousness, writing: “The Board did not err in discounting modifications not presented in Medtronic’s petition as indicative of hindsight. It was within the Board’s discretion not to consider these untimely raised modifications.” *Id.*

Medtronic would govern here. The Petition listed only one element of Toyama that would be changed: the individual insulating liners replaced with a unitary dielectric fill. *See* -791 Pet., 96–108. Nowhere did the Petition mention any alteration to the “backside contact trenches 79” that Petitioner claimed in its Reply could be modified to allow for gate replacement. *See id.*; -791 Reply, 21–22; -791 POSR, 25. Nor did the Petition discuss introduction of staircase contacts on both sides of the array, introduced in Reply to purportedly address the current flow reduction problem of the Petition’s proposed modification. -791 POSR, 28. The further modifications were ones not set forth in the Petition, which the Board both had “discretion not to consider” and could “discount[] . . . as indicative of hindsight.” *Medtronic*, 70 F.4th at 1346–47. The Request’s cited cases are inapposite because they do not address the specific scenario here where a petitioner makes *additional modifications* to the Petition grounds in the Reply, rather than just introducing new evidence to support the original ground. *See Rembrandt Diagnostics, LP v. Alere, Inc.*, 76 F.4th 1376 (Fed. Cir. 2023); *Apple Inc. v. Andrea Elecs. Corp.*, 949 F.3d 697 (Fed. Cir. 2020); *Idemitsu*, 870 F.3d at 1376; *Sanofi-Aventis Deutschland GmbH v. Mylan Pharms. Inc.*, 791 F. App’x 916 (Fed. Cir. 2019).

2. PO did not merely suggest operability problems; it established them

The Request again resorts to misrepresenting what the Board actually found. Petitioner claims that the Board did not “mak[e] any finding that Patent Owner’s concerns would actually

undermine the operability of the proposed combination.” -791 Request, 14. Wrong: the Board was “persuaded by Patent Owner’s second argument” that replacing the insulating liners with dielectric fill “removes large portions of the conductive layers in the array region that form word lines used to transmit signals for controlling memory,” which PO expressly contended would mean that “Toyama’s device would no longer work as intended.” *See* -791 FWD, 43 (citing -791 POR, 42–46); -791 POR, 43.

Similarly, Petitioner latches onto an isolated parenthetical in the FWD to paint a false picture of PO and the Board as relying on mere “potential hazards” from Petitioner’s modification. *See* -791 Request, 14–15. PO did far more than just “suggest” or “raise[] concerns” about operability and “potential hazards”—it submitted a detailed expert declaration explaining specific problems arising from putting a block of dielectric fill material where previously there were only liner-coated structures. *Compare* -791 Request, 13–15, *with* -791 Yang Decl. ¶¶ 80–96. Dr. Yang, PO’s expert, explained that substituting a dielectric fill would (1) block openings that Toyama uses for “depositing etchant and conductive material during the gate replacement process,” and (2) replace conductive material with an insulator, thus narrowing the region of current flow and leading to higher defect rates. *See* -791 Yang Decl. ¶¶ 80–96. PO thus did far more than just suggest or raise potential hazards, it demonstrated actual problems with the modification proposed.

Lastly, Petitioner argues that the Board failed to make findings regarding predictable results, which was no error at all. Predictable results are assessed only where a reason to modify the prior art has been established. *See, e.g.*, MPEP § 2143.02 (“Where there is a reason to modify or combine the prior art to achieve the claimed invention, the claims may be rejected as *prima facie* obvious provided there is also a reasonable expectation of success.”). Here, the Board correctly found that Petitioner had “not sufficiently shown that a POSITA would have been

motivated to replace dielectric liners 674 and the various layers with a block of dielectric material.” -791 FWD, 47. Where there is no showing of a reason to make the proposed modification, there is no need to assess the predictability of that modification’s results. Micron also asserts that the lack of finding about predictable results renders unsupported the Board’s bottom-line holding that Petitioner’s proposed combination was not a simple substitution of known elements to achieve a known result. -791 Request, 15; -791 FWD, 45. That argument is nonsensical. Petitioner itself proved that its combination was not a “simple substitution” with its ever-blossoming list of additional modifications to make its proposed combination work. *See supra*. In any event, the Board’s finding that Petitioner’s proposed modification would not work for its intended purposes was an adequate finding of lack of predictable results. *See DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1326 (Fed. Cir. 2009) (“Although predictability is a touchstone of obviousness, the ‘predictable result’ discussed in KSR refers not only to the expectation that prior art elements are capable of being physically combined, but also that the combination would have worked for its intended purpose.”).

III. CONCLUSION

For the foregoing reasons, the Request for Director Review should be denied.

DATED: February 12, 2026

MUNGER, TOLLES & OLSON LLP

By: /s/ Andrew Radsch
ANDREW RADSCH
(admitted *pro hac vice*)
MUNGER, TOLLES & OLSON LLP
560 Mission Street, 27th Floor
San Francisco, California 94105
Telephone: (415) 512-4000
andrew.radsch@mto.com
*Attorney for Patent Owner Yangtze Memory
Technologies Co., Ltd*

CERTIFICATE OF SERVICE

I, Andrew Radsch, hereby certify that on this 12th day of February, 2026, a copy of the foregoing **AUTHORIZED RESPONSE TO DIRECTOR REVIEW REQUEST** was served via the Patent Trial and Appeal Case Tracking System (P-TACTS), with an additional courtesy copy via e-mail, on the following:

K. Patrick Herman, pherman@orrick.com
Jermy Jason Lang, jliang@orrick.com
Jared Bobrow, Jbobrow@orrick.com
P52PTABDocket@orrick.com
PTABDocketJL2@orrick.com
PTABDocketJ3B3@orrick.com
Micron-ymtc_ohs@orrick.com

DATED: February 12, 2026

MUNGER, TOLLES & OLSON LLP

By: /s/ Andrew Radsch
ANDREW RADSCH
MUNGER, TOLLES & OLSON LLP