

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GLOBUS MEDICAL, INC.
Petitioner,

v.

SPINELOGIK, INC.,
Patent Owner

Case IPR2025-00226
Patent No. 8,460,385

AUTHORIZED RESPONSE TO DIRECTOR REVIEW REQUEST

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I. Introduction

Patent Owner's Request demonstrates only a disagreement with the Board's weighing of the evidence on a fact-bound issue—whether the record establishes that the Moskowitz–Steffee combination satisfies the parallel plane limitation of Claim 1. The Final Written Decision expressly stated the correct burden of proof and then applied it by first considering the Petition and supporting evidence, duly considering Patent Owner's counterarguments, and only then finally determining that the challenged claims were obvious and Petitioner had carried its burden. Merely pointing out flaws in the Patent Owner's arguments and noting its failure to rebut Petitioner's evidence is not shifting the burden of proof.

Nor did the Board's analysis run afoul of *Xerox*, because there was no missing limitation in the Moskowitz-Steffee combination—**both** underlying references explicitly disclosed or suggested the use of parallel channel planes, and the expert declaration cited evidence and provided technical reasoning supporting the conclusion that a skilled artisan would have maintained that already-present limitation in the proposed combination.

Patent Owner's Request fails to show any legitimate justification for Director Review. It is merely a repackaging of arguments that the Board already considered and found unpersuasive, and should be denied.

II. Patent Owner’s Focus on a “Single Sentence” Ignores the Totality of the Evidence.

A. The Petition’s Showing on Claim 1.3 Was Not Limited to a Single Sentence.

Patent Owner misleadingly frames Petitioner’s proof of obviousness as if it comprised only a “single sentence” from Mr. Culbert’s declaration. Paper 22 (“Request”) at 1. But as shown below, this “single sentence” is a summation directly supported in the Petition and the declaration by the prior art and expert testimony explaining its significance to a person of ordinary skill in the art (“POSA”). The Petition explained at length, with evidentiary support, how and why a POSA would have combined Moskowitz and Steffee, and showed that the resulting combination would possess all limitations of Claim 1, including Claim 1.3.¹ The totality of this analysis and evidence serves as the basis for the Petition’s specific analysis of Claim 1.3, and as the Board correctly concluded, satisfied Petitioner’s burden of proof.

Ground 3, the Moskowitz-Steffee combination, uses the curved anchors of Steffee (Ex. 1005) with the vertebral implant (“screw box”) of Moskowitz (Ex. 1004), modified to accommodate Steffee’s anchors. The Petition first showed that a POSA was motivated to use Steffee’s curved anchors with Moskowitz’s implant (Ex. 1004), because Steffee taught that curved anchors would minimize potential post-

¹ “Claim 1.3” refers to claim limitation 1.3.

implantation migration. Paper 2 (“Petition”), 84, 87-89. This is because curved anchors enable a near-perpendicular insertion angle for the anchor into bone graft material, which minimized forces acting on the anchor that could cause migration of straight anchors having a flatter entry angle. *Id.*, 85-89 (citing Ex. 1002 ¶¶ 165-169).

Because Moskowitz employed straight anchors, the Petition explained that a POSA would have modified Moskowitz’s existing channels (“screw or drill guides”) to accommodate the curved anchors. *Id.*, 90. This entailed adding size and curvature to Moskowitz’s existing channels, complementary to the curvature of the anchors, to ensure they did not become trapped. *Id.* (citing Ex. 1002 ¶ 171). This was the only modification of Moskowitz’s channels proposed or identified as necessary by Mr. Culbert. *Id.*, 90-91; Ex. 1002 ¶¶ 171-173.² The proposed modification did not entail changes to the fixed channel entry or exit points in Moskowitz, meaning there would be no change to the parallel channel planes defined by these points. The Petition further showed there was a reasonable expectation of success in making the combination. Petition, 91; Ex. 1002 ¶¶ 172-173.

² Patent Owner’s citation to oral argument asserting that “Mr. Culbert’s assertion was the ‘only evidence of record on that point’” (Request at 6) misstates the record; there, counsel referenced Mr. Culbert’s testimony that the only required change was the internal curvature of the channel, not merely one sentence. Paper 20, 74:20-75:4.

The Petition then showed where each limitation of the challenged claims was present in Moskowitz-Steffee. Petition, 91-95. Because Moskowitz was the basis for Ground 1, the Petition’s showing for the Ground 3 claim limitations cites to and incorporates relevant portions of the Ground 1 analysis, and did so specifically for Claim 1.3. *Id.*, 93-94 (citing Section VIII.A, “Ground 1” of the Petition).

The Petition showed that Moskowitz disclosed cross-sectional planes along paths that are traversed by their respective curved channels (the anchor members being inserted through the channels and into the vertebral bodies). Petition, 46-48, 93. The Petition further showed that Moskowitz’s existing channel planes are parallel to one another, based on Moskowitz’s own figures and what they explicitly teach a POSA. *Id.* at 47-48; Ex. 1002 ¶ 97. The Petition’s annotation of Moskowitz’s Fig. 1C is reproduced below for reference:

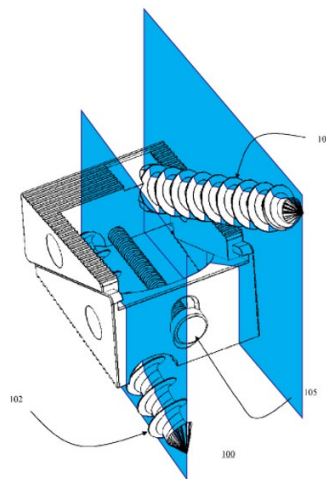
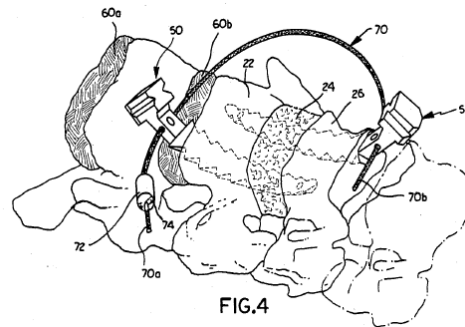


Fig. 1C

Petition, 48. The Petition further explained that Moskowitz also explicitly describes its anchors (“screw members”) as being “laterally aligned with the [screw] box,” and

that a POSA would also understand this disclosure to teach that Moskowitz's channels have parallel planes. *Id.* (citing Ex. 1004, 5:11-18; Ex. 1002 ¶ 97).

The Petition also explained that Steffee independently teaches or suggests that its anchors (50, 52) are inserted parallel to one another, based on Steffee's Figure 4. Petition at 93-94. That figure is reproduced for reference below:



Ex. 1005, Fig. 4.

These disclosures form the specific context and basis for Mr. Culbert's "single sentence" explaining that a POSA "would have maintained the same [parallel] cross-sectional planes in Moskowitz-Steffee as disclosed in Moskowitz itself." Ex. 1002 ¶ 179. The declaration explicitly cites to this same analysis of Moskowitz as well as Steffee's disclosure detailed above. *Id.* The Petition, which cites to and tracks Mr. Culbert's declaration, does the same. Petition, 93.

Thus, the basis for Mr. Culbert's "single sentence" conclusion that a POSA would have maintained the parallel cross-sectional planes includes (1) the underlying obviousness analysis, which relies on Steffee's specific insertion geometry to achieve the proposed benefit of the combination; (2) the proposed

combination's only required modification being to the internal curvature of Moskowitz's channels, to complement Steffee's curved anchors (and not any other changes); (3) Moskowitz's existing parallel planes, explicitly disclosed in its figures and written description; and (4) Steffee's disclosure or suggestion that its anchors be inserted parallel to one another. Thus, it was not merely a conclusion that "assumed the proposition to be proved." Request at 5. Mr. Culbert's testimony at paragraph 179 does not exist in isolation, but incorporates and builds upon the earlier analysis, including how the proposed modification to incorporate Steffee's curved anchors would enable the anchors to enter at the near-perpendicular angle disclosed in Steffee and preserve the relative channel alignment, while adding internal curvature complementary to Steffee's curved anchors.

The Board correctly understood this holistic showing, specifically citing and quoting the Petition's analysis. Paper 21 ("FWD"), 36-37. Only after considering this full evidentiary picture did the Board credit Mr. Culbert's testimony. *Id.*, 38.

B. The Moskowitz–Steffee Modification Simply Preserves the Existing Parallel Geometry in Both References

Patent Owner's argument presupposes that any modification of Moskowitz's straight screw guides into curved paths would necessarily alter the existing parallel-plane relationship. Request at 5. But Patent Owner never established this premise in either its Response or at the oral hearing. Rather, Patent Owner merely suggested, via attorney argument without any evidentiary support (from either the references or

testimony of any kind, including cross-examination of Mr. Culbert) that the combination entailed “wholesale redesign” that “would fundamentally alter Moskowitz’s geometry” and would “necessarily change the spatial relationships between channels.” Paper 13 (“POR”) at 66.

Although Petitioner pointed out this lack of support, Patent Owner neglected to file a sur-reply or supply any evidentiary basis for its positions. Paper 15 (“Reply”) at 17-18. Instead, at oral argument Patent Owner again relied on the same generic, unexplained, and unproven “geometric limitations.” Paper 20, 72:4-13.

There is no evidence that any of the problems that Patent Owner presumes, as the foundation of its entire position, even exist. They are simply conjecture by counsel. Indeed, Patent Owner admitted that the combination “produces a channel capable of passing a curved, non-threaded component” and that “Moskowitz discloses parallel channel orientations.” POR, 63.

Thus, Petitioner established, with evidence, that Moskowitz used parallel channel planes (as admitted by Patent Owner), and that the proposed combination required modification only to the internal channel curvature, not to the plane orientation or “geometry.” Patent Owner’s attorney argument, merely suggesting that the combination created unexplained geometric difficulties, does not create some heightened evidentiary burden requiring Petitioner to address these phantom problems before making its *prima facie* case of obviousness. Petitioner carried its

evidentiary burden, and as discussed in Section III below, the Board never shifted that burden to Patent Owner.

The Board found Patent Owner's logic unpersuasive precisely because the proposed modification is not a wholesale redesign, but the simple addition of internal curvature to channels that already share parallel orientations. FWD, 37-38, 40. The Board expressly noted that "[t]he only proposed modification to the channel geometries is adding internal curvature." FWD, 40. The Board never required Patent Owner to disprove the modification by bringing forward any evidence, but noted that Patent Owner had failed to offer even a reasoned explanation for "why merely changing internal curvature" would alter the existing plane orientation. FWD, 40.

III. The Board Did Not Shift any Burden to Patent Owner.

Patent Owner's burden-shifting argument is based on a mischaracterization of the Board's analysis. Patent Owner argues that the Board improperly shifted the burden of persuasion to Patent Owner, contrary to *Magnum*. Request at 7-8. In *Magnum*, the PTO argued that the burden of production shifted after institution, requiring the patent owner come forward with evidence to rebut the *prima facie* case of obviousness. *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1374 (Fed. Cir. 2016). The court rejected this, explaining that the burden of persuasion and production remained with the petitioner. *Id.* at 1376. But here, the Board unambiguously assigned the burden to Petitioner, noting that it never shifts to Patent

Owner, explicitly citing *Dynamic Drinkware*. FWD, 6. The Board then applied that standard throughout its analysis.

Patent Owner’s assertion that the Board reached its determination only because “Patent Owner had not disproved it” (Request, 6) is contradicted by the Final Written Decision. As the Federal Circuit has explained, “a party with the burden of persuasion must convince the factfinder to the degree of certainty required by the standard (here, preponderance of the evidence), and no further.” *CQV Co., Ltd. v. Merck Pat. GmbH*, 130 F.4th 1344, 1350 (Fed. Cir. 2025). The Board’s analysis reflects this exactly. The Board expressly addressed Claim 1.3, Claim 2, and Claim 4, each of which involves geometric relationships of the curved channels in the modified device. FWD, 36–38, 38-40, 44-46. In doing so, the Board explicitly relied on Petitioner’s analysis discussed above. *Id.*; *see also id.*, 45 (“Petitioner’s asserted combination does not require redesigning Moskowitz’s screw box surfaces. Instead, the Petition suggests modifying the path of Moskowitz’s internal channels to accommodate Steffee’s curved anchors while maintaining Moskowitz’s channel arrangement.”) (citing Petition, 84–94).

Only **after** first considering both Petitioner’s arguments and evidence, and Patent Owner’s counterarguments, did the Board conclude that “Petitioner demonstrates, by a preponderance of the evidence, that the combination of Moskowitz and Steffee renders obvious the subject matter of limitation 1.3.” FWD,

37. The Board then detailed the flaws in Patent Owner’s arguments, observing that Patent Owner “does not adequately address why one of ordinary skill would not have maintained the parallel spatial relationship. *Id.*, 38. This is a standard assessment of rebuttal argument, not a burden shift. Moreover, the Board’s characterization of Mr. Culbert’s testimony as “unrebutted” does not constitute burden shifting. It is simply a factual observation that Patent Owner chose not to submit any evidence in support of its position. The Board was entitled—indeed required—to consider the state of the evidentiary record as it exists. Patent Owner’s strategic decision not to submit evidence does not transform a properly credited expert opinion into “burden shifting.” The absence of contrary evidence is relevant to the weight the Board assigned to Petitioner’s evidence.

Despite the fact that the underlying references each explicitly disclosed or suggested to a POSITA to maintain parallel channels in the modified reference, Patent Owner made the strategic decision not to challenge these disclosures, Petitioner’s reasoning, or the expert analysis and testimony presented, with anything but attorney argument. The Board properly considered the evidence and found it satisfied Petitioner’s burden. Petitioner carried its *prima facie* case. It was not required to go further by disproving Patent Owner’s theoretical and unexplained problems with the proposed combination, which were solely the product of counsel’s rhetoric and unsupported by any evidence, or even reasoning, whatsoever.

Ignite USA, LLC v. CamelBak Prods., LLC, 709 F. App'x 1010 (Fed. Cir. 2017) is instructive. There, as here, the patent owner (Ignite) argued that the Board improperly shifted the burden of persuasion to Ignite “to come forward and *disprove* the allegedly ‘obvious’ modification.” *Id.*, 709 F. App'x at 1016 (italics in original). Ignite, like Patent Owner here, supported its position “by selectively quoting the PTAB’s consideration and rejection of Ignite’s counterarguments.” *Id.* The court explained that “the PTAB did not simply reject Ignite’s counterarguments; it also concluded that it would have been obvious to [a POSA] to have modified [the prior art reference] . . . and supported that conclusion with expert testimony.” *Id.* (quotation marks omitted). The court found that “explaining why a party's arguments are not persuasive does not constitute improper burden shifting.” *Id.*; *see also* *Essity Prof'l Hygiene N. Am. LLC v. Cascades Can. ULC*, 811 F. App'x 643, 645-46 (Fed. Cir. 2020) (finding no burden shifting where the Board evaluated the arguments and evidence presented by both parties before concluding that the petitioner had met its burden, and rejecting the suggestion that “the Board’s statements refuting [patent owner’s] evidence amount to shifting the burden to [patent owner] to disprove a motivation to combine. It was proper for the Board to identify the failures in [patent owner’s] arguments”).

The same is true here. The Board did not shift the burden, but squarely placed it on Petitioner. Only after evaluating the arguments and evidence in the Petition,

and Patent Owner’s counterarguments, did the Board find that Petitioner had met its burden. Its statements identifying the holes in Patent Owner’s arguments are not improper burden shifting.

IV. The Board Correctly Concluded that *Xerox* did not Apply to Ground 3 Because There Was No Missing Limitation.

Patent Owner’s *Xerox* argument conflates two distinct evidentiary situations. The Board did not apply *Xerox* differently between grounds, but did not apply it to Ground 3 because there was no missing limitation. The Board’s rejection of Hess and its acceptance of Moskowitz–Steffee reflect materially different factual circumstances, not inconsistent legal standards.

The challenged claims require an **intervertebral** fusion device for positioning between adjacent vertebrae. Ex. 1001, 26:56-58. For Ground 2, Petitioner proposed modifying Hess’s **interspinous** implant—a device positioned between the spinous processes, not between the vertebrae—based on Mr. Culbert’s opinion that the necessary modifications to do so would have been obvious. FWD, 15; Petition, 62-63. The Board—exactly as it did for Ground 3—considered Petitioner’s arguments and evidence, then Patent Owner’s counterarguments. FWD, 15-16. The Board found that Hess did not teach or suggest an intervertebral device, and that Mr. Culbert’s testimony failed to explain how or why Hess would be redesigned to function as an intervertebral device. *Id.*, 17-19. As such, the Board concluded that there was a missing limitation—specifically, the reference did not teach or suggest

an intervertebral fusion device as claimed. *Id.*, 19-20.

However, the Moskowitz-Steffee combination is not missing any limitation. Moskowitz discloses an intervertebral fusion screw box, which—as Patent Owner admitted—already possessed parallel channel planes. POR, 64 (“Petitioner correctly notes that Moskowitz discloses parallel channel orientations.”) Steffee also teaches or suggests that its curved anchors would be inserted parallel to one another—that is, in parallel planes. Ex. 1005, Fig. 4; Petition, 93-94. As the Board noted, the proposed modification does not require converting one type of device into a completely different one, but merely replacing Moskowitz’s straight anchors with Steffee’s curved anchors and modifying Moskowitz’s existing parallel channels to include internal curvature. FWD at 29, 31, 33. The Board simply rejected Patent Owner’s unsupported conjecture that the modification entailed a wholesale redesign that would alter the existing parallel planes. *Id.* at 29-30, 37-38. Mr. Culbert’s testimony regarding parallel planes (Ex. 1002 ¶ 179) does not supply a missing limitation, but explains why a POSA would have maintained the plane geometry **already present** in Moskowitz, and as **expressly suggested** by Steffee, when modifying the channels’ internal path from straight to curved. Indeed, this is what *Xerox* specifies: “additional supporting evidence” and “technical reasoning.” *Xerox v. Bytemark*, IPR2022-00624, Paper 9 at 15 (PTAB Aug. 24, 2022). This is permissible expert testimony explaining the application of prior art teachings that

already disclosed the claim limitation at issue.

Patent Owner attempts to overcome these facts by attacking the references individually, just as it did in its Response. Request, 9; *see* Reply, 16-17. But Petitioner was not required to show that each reference alone already disclosed all claim elements. The Board agreed, explaining that Patent Owner’ arguments failed to address what the references’ “combined teaching would have suggested to [a POSA].” FWD, 33.

There is no “missing geometry” (Request, 10), and neither Petitioner nor the Board used “expert say-so” to supply a missing disclosure. Patent Owner’s demand that Petitioner provide “specified dimensions, radii, [or] entry points” (*id.*) is simply an improper attempt to require bodily incorporation. *MCM Portfolio LLC v. Hewlett-Packard Co.*, 812 F.3d 1284, 1294 (Fed. Cir. 2015) (“[T]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.”) (quoting *In re Keller*, 642 F.2d 413, 425 (C.C.P.A. 1981)). The Board properly focused on the correct legal inquiry—what the combined teachings would have suggested to one of ordinary skill in the art. FWD, 33. Petitioner had no burden to prove the details demanded by Petitioner, especially where the parallel planes

were already present in Moskowitz and taught and suggested by Steffee for use with its curved anchors.

V. Conclusion

Director review is warranted for an abuse of discretion, an important issue of law or policy, an erroneous finding of material fact, or an erroneous conclusion of law.³ Patent Owner fails to show that any of these circumstances are present. The Board had clear and reasoned evidentiary support for its decision, appropriately assigned the burden of proof to Petitioner, and duly considered both parties' arguments and evidence before correctly applying the law. Petitioner respectfully submits that the Director should deny Patent Owner's Request and leave intact the Final Written Decision finding the challenged claims unpatentable.

Dated: August 17, 2026

Respectfully submitted,

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³ <https://www.uspto.gov/patents/ptab/decisions/director-review-process> at § 2.B.

Petitioner notes that 37 CFR 42.75(c), cited by Patent Owner (Request at 1), does not recite any bases warranting director review.

CERTIFICATE OF SERVICE

I hereby certify that on this 17th day of August 2026, a copy of this paper was served via email to Patent Owner's counsel of record at the email addresses identified in Patent Owner's Mandatory Notices (Paper 17):

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/James H. Hall/

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