

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GLOBUS MEDICAL, INC.
Petitioner,

v.

SPINELOGIK, INC.,
Patent Owner

IPR2025-00225
Patent No. 9,730,805

PETITIONER'S REPLY

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EXHIBIT LIST

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1001	U.S. Patent No. 9,730,805 (“the ’805 Patent”)
1002	Declaration of Technical Expert Brad Culbert
1003	Prosecution History of the ’805 Patent
1004	U.S. Patent 8,172,854 (“Blain”)
1005	U.S. Provisional Application No. 60/950,801 (“Blain-Provisional”)
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1007	Excerpts from Webster’s New World College Dictionary (4 th Ed., 1999)
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1013	Patent Owner’s Infringement Contention Claim Chart for ’805 Patent Against Globus Hendron AI Interbody Spacer
1014	U.S. Patent No. 8,535,353
1015	U.S. Patent No. 5,766,253
1016	U.S. Patent No. 4,790,303 (“Steffee”)
1017	U.S. Patent No. 9,358,127 (“Duffield”)
1018	U.S. Patent No. 7,942,903

Exhibit No.	Description
1019	U.S. Patent No. 8,075,593
1020	U.S. Patent Application Publication No. 2006/0265076
1021	Spinelogik's Preliminary Identification of Proposed Terms for Construction in <i>Spinelogik, Inc. v. Globus Medical, Inc.</i> , No. 2:23-cv-529-JRG-RSP, served October 30, 2024
1022	Globus's Preliminary Claim Constructions in <i>Spinelogik, Inc. v. Globus Medical, Inc.</i> , No. 2:23-cv-529-JRG-RSP, served October 30, 2024
1023	U.S. Patent No. 7,918,891
1024	U.S. Patent No. 8,328,851
1025	U.S. Patent No. 7,846,210
1026	U.S. Patent No. 8,673,005
1027	U.S. Patent No. 6,923,814
1028	U.S. Patent Application Publication No. US 2007/0270806
1029	U.S. Patent No. 6,613,091
1030	U.S. Patent No. 8,273,127
1031	Globus Marketing Video for Hendron IA Interbody Spacer
1032	U.S. Patent No. 7,662,186
1033	U.S. Patent No. 8,100,955
1034	U.S. Patent No. 7,041,135
1035	U.S. Patent No. 6,447,546
1036	U.S. Patent Application Publication No. US 2009/0112261
1037	U.S. Patent No. 8,105,382

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1038	U.S. Patent Publication No. 2005/0085913 ("Fraser")
1039	<i>Curriculum Vitae</i> of Brad Culbert
1040	Machinery Handbook, 28th Ed. (Excerpts)
1041	Spinelogik Opening Claim Construction Brief in <i>Spinelogik, Inc. v. Globus medical, Inc.</i> , No. 2:23-CV-529-JRG-RSP
1042	Globus Responsive Claim Construction Brief in <i>Spinelogik, Inc. v. Globus medical, Inc.</i> , No. 2:23-CV-529-JRG-RSP
1043	Excerpts from Webster's New World College Dictionary (4 th Ed., 1999)
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1046 - 1100	Reserved
1101	Order Staying Case (Dkt. 53), <i>Spinelogik, Inc. v. Globus medical, Inc.</i> , No. 2:23-CV-529-JRG-RSP (E.D. Tex. Jan. 24, 2025)
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1103	Sanctions Order, <i>Symbology Innovations, LLC v. Valve Corp.</i> , No. 2:23-CV-00419-JRG (Dkt. 110), <i>Quantum Tech. Innovations, LLC v. Valve Corp.</i> , No. 2:23-CV-00425-JRG (Dkt. 75) (E.D. Tex. Jan. 31, 2025)
1104	PDF-Printout of "Team" Webpage, available at https://ghiplaw.com/team (last accessed May 2, 2025)
1105	Sanctions Order (Dkt. 72), <i>Blue Spike, LLC v. Caterpillar, Inc.</i> , No. 6:16-CV-01361-RWS (E.D. Tex., May 10, 2017).

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1106	Exceptional Case Order (Dkt. 94), <i>Decapolis Systems, LLC v. UT Southwestern Health Systems</i> , No. 2:22-cv-00159-JRG-RSP (E.D. Tex. Mar. 28, 2025)
1107	Stay Order (Dkt. 106), <i>Cellspin Soft, Inc. v. ByteDance Ltd.</i> , No. 2:23-CV-00496-JRG-RSP (E.D. Tex. Jan. 26, 2025)
1108	USPTO “Documents & Transaction History” for Application No. 13/655,412 (last accessed on April 30, 2025).
1109	Preliminary Infringement Contentions, <i>Spinelogik, Inc. v. Globus medical, Inc.</i> , No. 2:23-CV-529-JRG-RSP (E.D. Tex. Mar. 11, 2024)
1110	Preliminary Infringement Claim Chart Against Globus’s Independence MIS® Implant, <i>Spinelogik, Inc. v. Globus medical, Inc.</i> , No. 2:23-CV-529-JRG-RSP (E.D. Tex. Mar. 11, 2024)
1111	Preliminary Infringement Claim Chart Against Globus’s Coalition MIS®, <i>Spinelogik, Inc. v. Globus medical, Inc.</i> , No. 2:23-CV-529-JRG-RSP (E.D. Tex. Mar. 11, 2024)
1112	Preliminary Infringement Claim Chart Against Globus’s Corbel® Implant, <i>Spinelogik, Inc. v. Globus medical, Inc.</i> , No. 2:23-CV-529-JRG-RSP (E.D. Tex. Mar. 11, 2024)
1113	Preliminary Infringement Claim Chart Against Globus’s Hedron IA® Implant, <i>Spinelogik, Inc. v. Globus medical, Inc.</i> , No. 2:23-CV-529-JRG-RSP (E.D. Tex. Mar. 11, 2024)
1114	Stay Order (Dkt. 103), <i>Multimedia Techs. PTE. LTD. v. Vizio, Inc.</i> , No. 2:23-CV-00124-JRG-RSP (E.D. Tex. Aug. 22, 2024)
1115	Transfer Order (Dkt. 114), <i>Multimedia Techs. PTE. LTD. v. Vizio, Inc.</i> , No. 2:23-CV-00124-JRG-RSP (E.D. Tex. Jan. 22, 2025)
1116	Docket Sheet (as of April 30, 2025) in <i>Spinelogik, Inc. v. Globus Medical, Inc.</i> , No. 2:23-CV-529-JRG-RSP (E.D. Tex.)

Exhibit No.	Description
1117	Order Denying Stay (Dkt. 73), <i>MyPort, Inc. v. Samsung Electronics Co., Ltd.</i> , No. 2:22-CV-00114 (E.D. Tex. June 13, 2023)

I. INTRODUCTION

Spinelogik cannot legitimately dispute that the claims are unpatentable, so it resorts to meritless claim constructions, mischaracterizations, and unsubstantiated attorney-argument.

II. PERVASIVE DEFECTS IN SPINELOGIK'S RESPONSE

A. Spinelogik Repeatedly Violates Black-Letter Law

Despite Spinelogik proposing all terms should be given their plain and ordinary meaning, Spinelogik repeatedly cherry-picks specific features from the detailed embodiments and pretends they are part of the claim language to avoid unpatentability. Indeed, Spinelogik's entire response is premised on comparing selected portions of the *specification* to the prior art, while ignoring the *claims*.

Spinelogik argues, for example, the claims are limited to a “*push-in, flanged* anchoring mechanism,” to the exclusion of Blain's threaded anchors. Patent Owner Response (“POR”), 2. Spinelogik provides no evidence or legal basis for reading this limitation into the claims. In fact, the '805 patent teaches that “anchoring members of some embodiments *have threads*” just like Blain's anchors, further exposing the baselessness of Spinelogik's position. Ex. 1001, 23:60–24:4.

Similarly, Spinelogik's contention that the “anchoring members” require a “push-in flanged anchor system with *PMMA injection capability*” (POR, 33) is contradicted by the specification, which teaches anchors without injection

capability: “In some embodiments, the anchoring members may be *without a central lumen*.” Ex. 1001, 25:61–62.

The table below shows how pervasively Spinelogik advances meritless claim constructions:

Term	Spinelogik's Interpretation
“channels” (all claims)	“internal channel geometry designed to guide flexible anchoring members along curved trajectories,” and excluding “straight-through apertures” (POR, 35)
“anchoring member” (all claims)	“push-in” with “proximal flange locking” and “PMMA injection capability” that must be “tapped, hammered, or simply pushed” into place, “barbed, flexible pins inserted by linear force” and excluding “threaded screws” (POR, 2–3, 41–43, 53)
“delivery mechanism” (all claims)	A “unified housing” that “contains channels for both anchoring members and retention mechanisms within a single unified component” (POR, 39–40)
“delivery housing” (claims 2, 4)	“unified,” “permanently housing” and excluding “temporary” housing (POR, 44–45).
“retention rod” (claim 3)	“guided by dedicated channels” with “retention teeth” that “directly engage grooves on the lateral surfaces of the fusion member” and excluding “internal” rods (POR, 47–48)
“driving member” (claim 15)	“specialized component designed to apply linear, axial force” and “specifically configured to decouple from” the anchor and excluding driving members that apply rotational force to drive (POR, 56–57)

There is no basis for these limitations, which is why Spinelogik proposes “plain and ordinary meaning” to actively avoid justifying its positions. *See Thorner v. Sony Comp. Entm't Am. LLC*, 669 F.3d 1362, 1367 (Fed. Cir. 2012) (“the patentee

is free to choose a broad term and expect to obtain the full scope of its plain and ordinary meaning *unless the patentee explicitly redefines the term or disavows its full scope.*”). Indeed, in the litigation Spinelogik admits it is improper to limit claims based on the specification, explaining that “[e]ven where ‘a patent describes only a single embodiment, the claims should not be construed as limited to that embodiment’ *absent a clear disavowal of claim scope.*” Ex. 1041, 2 (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005)).

Given that Spinelogik’s so-called prior art “distinctions” are based on absurd and unsubstantiated constructions, they should be rejected. And a key question for Spinelogik at oral argument is—what legal basis does it have for *any* of its proposed constructions? The answer is “none.”

B. Spinelogik Provides No Evidence

Globus demonstrated unpatentability with overwhelming evidence, including Mr. Culbert’s testimony (whom Spinelogik failed to cross-examine). Spinelogik provides no rebuttal evidence (including any expert declaration), and its attorney arguments cannot rebut Globus’ credible evidence. *See Wasica Fin. GmbH v. Cont’l Auto. Sys.*, 853 F.3d 1272, 1284 (Fed. Cir. 2017) (“[I]t was reasonable for the Board to accept Wasica’s expert testimony over Schrader’s bare attorney argument.”); *See Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 424 F.3d 1276, 1284 (Fed. Cir. 2005) (“Attorney argument is no substitute for evidence.”).

C. Spinelogik Misrepresents the Grounds

Spinelogik mischaracterizes the combinations proposed by Globus to create strawmen. For example, regarding Ground 3, Spinelogik argues Globus proposes using curved anchors (as taught by Steffee) with *straight* channels (as taught by Blain), so Spinelogik can argue the combination would not function due to the anchors “jam[ming].” POR, 67. But Globus never argued this—Globus proposed modifying the channels to “accommodate the curvature” of the anchors in part *to avoid jamming*. Pet., 87–88.

Similarly, regarding Ground 2, Spinelogik misrepresents that Globus proposed modifying Blain to include *both* its existing anti-rotation mechanism *and* the restraining plate of Bray. POR, 60–61. Yet, Globus clearly proposed the restraining plate as “a simple, yet improved *alternative* to the anti-rotation mechanism of Blain.” Pet., 74 (emphasis added).

III. CLAIM CONSTRUCTION

A. “housing” (claims 2–4)

Spinelogik attacks a strawman, arguing that Globus’ construction is “overly broad” because Globus “*could* improperly argue that the fusion member itself serves as the ‘delivery housing.’” POR, 11–12. But Globus never argued that Blain’s “fusion member” (implant 2) is the “delivery housing.” Globus identified the “delivery mechanism” (instrument guide 14) as “comprising” the “delivery housing”

(guide tubes 18/device coupler 16) as plainly required by claim 2. Pet., 61–64.

Spinelogik contends that the “delivery housing” is “a component of the delivery mechanism (not the fusion member) that houses and guides anchoring members *and retention mechanisms*.” POR, 12, 47. However, nothing in the claim language requires the “retention mechanism” to be part of the “delivery housing”—the “retention mechanism” need only be part of the “delivery mechanism.”

In its prior-art arguments, Spinelogik further attempts to improperly narrow “housing,” asserting that a “housing” is required to be “a single ... *unified* housing structure ... that performs *integrated* functions within a *unified* structural body” and excludes “*separate* structural components that are attached together *to form a modular assembly*,” and must “*permanently*” house “anchoring members” to the exclusion of “*temporary* containment during insertion.” POR, 43–45. There is no legal basis for reading *any* of these requirements into the ordinary meaning of “delivery housing.” Pet., 19–21.

B. “curved” channel (claims 5, 16)

Globus proposed the plain and ordinary meaning of “curved” channel as applied by Spinelogik in the lawsuit, which Spinelogik now contends is “a channel following a curved trajectory through the fusion member.” POR, 14. This is indistinguishable from Globus’ understanding of plain and ordinary meaning as set forth in the litigation. Ex. 1022, 2 (“channel... [that] has a curved path”). As such,

the parties agree on this construction.

Ground 3 demonstrated that claims 5 and 16 are unpatentable under this construction. Globus acknowledges that claims 5 and 16 are not unpatentable under Grounds 1 and 2 based on this construction.

IV. GROUND 1

A. Claims 1, 11

1.1/11.1¹ “a fusion member for positioning between two vertebral bodies, the fusion member having a first plurality of channels, each channel of the first plurality of channels having an opening on a same side of the fusion member;”

Spinelogik admits Blain “does disclose an implant 2 designed for position being vertebral bodies with apertures 4.” POR, 34-35. Nonetheless, Spinelogik *unreasonably* argues that “Petitioner's mapping obscures a critical structural distinction between Blain's straight-through apertures and the '805 Patent's *internal channel geometry*.” POR, 35. Nothing in the claim requires a special “internal channel geometry,” “shaped block, “curved tubular channels,”² non “straight-through” apertures, or “flexible” anchors.

¹ Globus uses the claim numbering from the Petition/Appendix.

² “Curved” is only recited in claims 5 and 16.

1.2.2/11.2.2 “the delivery mechanism extending outside a patient’s body to a medical practitioner while the delivery mechanism is coupled to the fusion member and the fusion member is positioned between the two vertebral bodies,”

Spinelogik touts this as “the very limitation that secured patent allowance” to portray it as “critical.” POR, 2–4, 31, 36–37. Ironically, Spinelogik then admits that this limitation was added solely because the Examiner *incorrectly* identified the “fusion member” of the prior art as the “delivery mechanism.” *Id.*, 12 (alleging Globus made “*the same error the Examiner made* with Duffield”). Spinelogik thus admits this limitation is not “critical.”

Globus proved this with evidence, explaining that although Blain does not expressly *state* that the “delivery mechanism” extends outside the patient’s body, a POSITA would find Blain to disclose this limitation based on the design of the handle 20, the fact that the fusion member must be within a certain size range to be implanted, the relative size of the instrument guide 14, Blain’s teaching that the instrument guide length can “vary,” and a POSAs knowledge of how fusion surgeries are performed. Pet, 51–54. Spinelogik argues that Globus relies on an “unsupported inference” and that “Blain provides no express disclosure of the spatial relationship between the handle and the patient’s body.” POR, 36–37. In offering only conclusory attorney-argument, Spinelogik willfully ignores—and fails to rebut—Globus’ cited evidence.

Spinelogik also contends that “Blain’s disclosure that the handle 20 is

‘detached from the distal shaft 22B’ specifically ‘to insert instruments or fasteners into the guide tubes 18 without potential interference from the protruding handle 20’ ... suggests that the handle may be removed precisely to *avoid extending outside the patient's body during fastener insertion*” POR, 38 (emphasis added).

First, this is an admission that when the handle is attached, *it would in fact “extend[] outside the patient’s body.”* Spinelogik also ignores Globus’ evidence demonstrating that “part of proximal shaft 22A of the instrument guide 14 would extend outside of the patient’s body.” Pet., 52. Thus, even assuming the handle is removed, a portion of proximal shaft 22A would still be outside the patient’s body.

Second, Spinelogik’s argument mischaracterizes the claim language. The claim does not require that the delivery mechanism extend outside the patient’s body “during *fastener insertion*.” It merely requires that the delivery mechanism extends outside the patient’s body “while the delivery mechanism is coupled to the fusion member and the fusion member is positioned between the two vertebral bodies.” Blain satisfies this—the instrument guide 14 (“delivery mechanism”) is coupled to the implant 2 (“fusion member”) while the guide handle 20 (outside the body) is used to position the implant between the vertebral bodies. Ex. 1004, 10:6–12.

Third, even assuming the “detachable” handle embodiment could somehow not satisfy this limitation, Blain teaches that “the handle 20 may be *permanently* attached” (Ex. 1004, 5:1–3), meaning the instrument guide 14 necessarily extends

outside the patient's body "during fastener insertion."

Finally, this limitation would have been obvious. Petition, 53–54. Spinelogik's contention that Globus "provides no articulated reasoning with rational underpinning" is nonsense. POR, 31, 37. Globus dedicated two pages to *multiple* articulated reasons with evidence (Pet. 53–54), which the Board found compelling. Institution Decision, 20. Spinelogik's response ignores these arguments and evidence, leaving them unrebutted and prohibiting Spinelogik from attempting to rebut them in its sur-reply.

1.2.3/11.2.3 "the delivery mechanism having a second plurality of channels, wherein each channel of the first plurality of channels is configured to be aligned with a different channel of the second plurality of channels when the delivery mechanism delivers the fusion member between the two vertebral bodies; and"

Spinelogik admits that "Blain does teach alignment between guide tubes 18 and implant apertures 4." POR, 39. Despite this admission, Spinelogik again ignores the claim language and relies on purported "critical structural and functional distinctions" between the *detailed embodiments in the specification* and Blain. *Id.*

Spinelogik also spends several paragraphs arguing that this limitation is not satisfied because "Blain lacks the *claimed 'delivery housing' structure*." POR, 39–40. However, only dependent claims 2 and 4 require this. Spinelogik thus misrepresents the requirements of the independent claims.

1.3/11.3 "a plurality of independent anchoring members configured to secure the fusion member to the vertebral bodies,

each independent anchoring member for (i) traversing through a different channel of the fusion member, (ii) penetrating into one of the vertebral bodies, (iii) coupling the fusion member to the penetrated vertebral body, and (iv) preventing decoupling of the fusion member from the penetrated vertebral body.”

Spinelogik admits the threaded engagement and anti-rotation lock mechanism of Blain “*prevent[] decoupling*,” but argues that Blain’s anchors fail to “satisfy the ‘preventing decoupling’ function *through the same structural mechanism as the ‘805 Patent*.” POR, 17–18, 20, 40. Specifically, Spinelogik contends that the *detailed embodiments* of the ’805 patent disclose a “*push-in flanged anchor system*” while Blain discloses a “threaded screw system,” arguing that the claims require anchors that are “*tapped, hammered, or simply pushed*,” “*prevented from decoupling*” via a recess in the fusion member, “*designed for injecting ... (PMMA) or other ... polymer*,” and designed to prevent “*axial pull-out*.” POR, 41–43. These purported requirements are legally baseless.

Spinelogik further argues that Globus failed to show this limitation is obvious. POR, 31–33. But Globus never argued that this limitation was “obvious” in Ground 1—Globus argued *it is plainly taught by Blain*. Pet., 57. Spinelogik’s attack against a non-existent obviousness theory based on a baseless claim construction is emblematic of the frivolity of Spinelogik’s entire response.

B. Claim 2

Globus demonstrated that Blain’s instrument guide 14 is a “delivery

mechanism,” that its guide tubes 18/device coupler 16 (yellow) satisfy the “delivery housing” limitation, and that the inner shaft 42 (along with its coupling member 28) (green)/coupling members 26 (red) satisfies the “retention mechanism” limitation. Pet. 61–64. Spinelogik’s contrary position is premised on a meritless claim construction.

Nothing in the ordinary meaning of “delivery housing” requires that it “perform[] integrated functions within a *unified structural body*,” be “a *single unified* ‘delivery housing,’” or exclude “*separate* components.” POR, 43–44, 46; *Supra* Section III.A. Thus, nothing precludes the guide tubes 18 or device coupler 16 (or their combination) from satisfying the “delivery housing” limitation. Even if it was, each of guide tubes 18 and device coupler 16 would independently qualify as a “delivery housing” under Spinelogik’s interpretation. Each performs “integrated functions” (housing and guiding the anchors during delivery to the implant) and constitutes a “unified structural body.”

Spinelogik argues that the “delivery housing” must provide “dual functionality” by “guiding both anchoring members *and retention rods*.” POR, 43. However, the claim only requires that the delivery housing is “for guiding each *independent anchoring member* into the fusion member”—it does not require “guiding retention rods.” Guide tubes 18 and device coupler 16 qualify as they each house and guide *the anchoring members*.

Spinelogik alleges that by identifying the guide tubes 18/device coupler 16 as the “delivery housing,” Globus’ expert “conflates *temporary* containment during insertion with structural ‘housing.’” POR, 44. This is another fabricated exclusion. Just as the specification teaches the delivery housing may “house” anchoring mechanisms that are only in the housing for deployment (i.e., “temporarily”), guide tubes 18/device coupler 16 “house” bone screws that are only in them for deployment. Ex. 1001, 13:25–27; *see also id.*, 2:37, 7:1–7, 11:27–28 (discussed in Petition, 20–21).

While Spinelogik’s arguments are hard to follow, Spinelogik appears to argue that the “retention mechanism” is required to be part of the “delivery housing.” POR, 45–46 (arguing that “the retention mechanism must couple the *housing itself* ... to the fusion member.”). This interpretation is contradicted by claim language, which merely requires that the “retention mechanism” be part of the “delivery mechanism.”

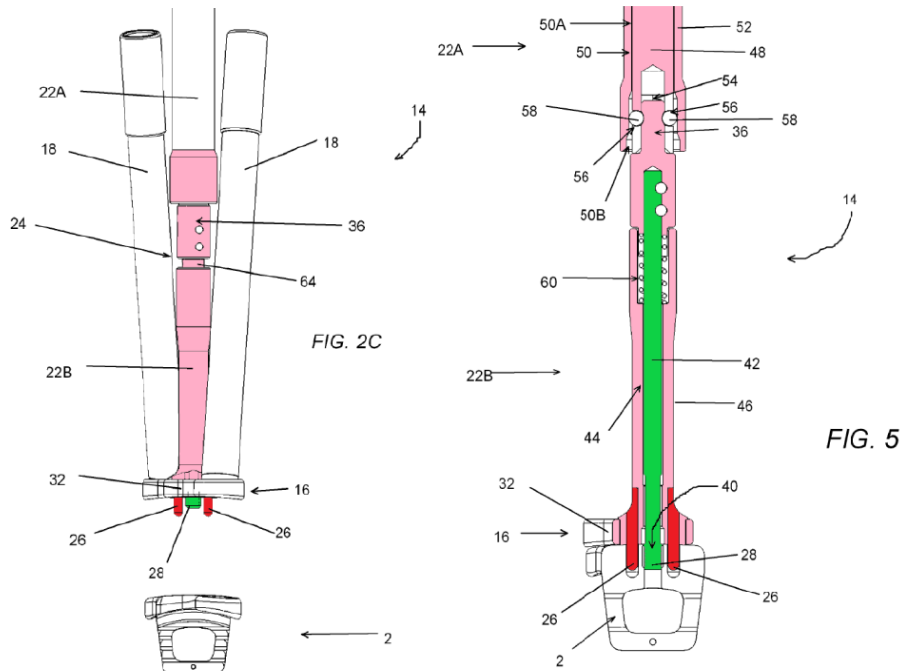
Moreover, even Spinelogik’s fictional limitation is satisfied. Spinelogik argues that “Blain’s retention mechanism resides within device coupler 16 and distal shaft 22B—**not within the guide tubes 18 that Petitioner identifies as the ‘delivery housing’ for guiding anchoring members.**” POR, 45–46. But Spinelogik ignores that Globus also demonstrated that device coupler 16 qualifies as the “delivery housing.” Pet., 62 (“The device coupler 16 likewise constitutes a *delivery housing*...”). By Spinelogik’s own admission, the “retention mechanism” of Blain

(inner shaft 42 with its coupling member 28) “resides within device coupler 16.”

Spinelogik also argues that “Blain’s retention mechanism couples **the entire instrument guide** assembly ... to the implant 2.” POR, 46. Although the point of this argument is unclear, it appears Spinelogik is arguing the claims require that the “retention mechanism” must **only** “fixedly coupl[e] the delivery housing to the fusion member.” There is no basis for this remarkably narrow requirement.

C. Claim 3

Spinelogik cannot reasonably dispute that Blain’s inner shaft 42 (including its coupling member 28 (green)) and coupling members 26 (red) are “rods” that “retain”—qualifying each as a “retention rod”:

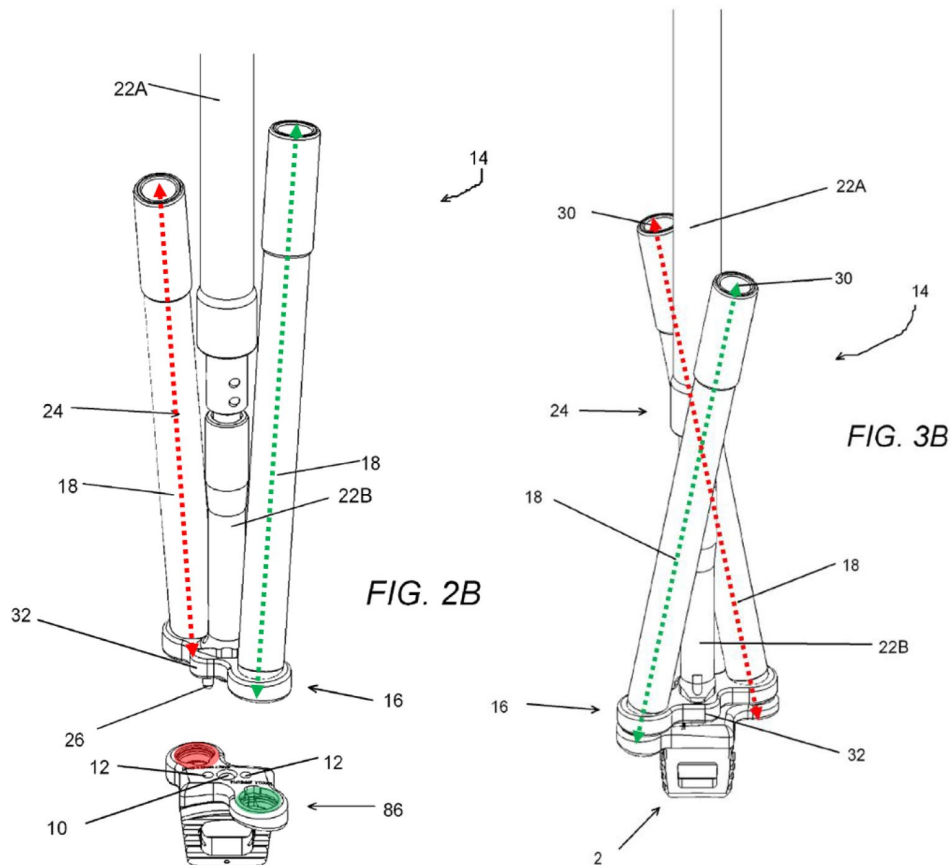


Pet., 62–64. Instead, Spinelogik falsely argues that “retention rod” requires a myriad of unclaimed features (e.g., “directly engage retention grooves 150 on the **lateral**

surfaces of the fusion member,” “direct, external, multi-point locking system”).
POR, 48. There is no legal support for these requirements.

D. Claim 4

Blain teaches this claim: “The *aligned coupling* between the instrument guide 14 [the *delivery mechanism* including the *delivery housing*] and implant 2 *matches* the guide lumens 18 of the instrument guide 14 with the fastener apertures 4 of the implant 2.” Ex. 1004, 5:30–33; Pet., 56.



Spinelogik asserts Globus is wrong because “[t]he alignment between [Blaine’s *guide tubes 18 and device coupler 16*] is *fixed and pre-exists* any

‘coupling’ event.” POR, 49. This is irrelevant—the claim merely requires that “the coupling of the *delivery housing* [guide tubes 18/device coupler 16] to the *fusion member* [implant 2] causes each channel of the fusion member [red/green circles] to be aligned with a different channel of the delivery mechanism [red/green dashed-lines].” This “coupling” clearly occurs when the *coupling* members 26 and 28 of the guide tubes 18/device coupler 16 (*delivery housing*) couple with the corresponding recesses of the implant 2 (*fusion member*).

Spinelogik’s suggestion that the *delivery housing* “itself” must **have** the coupling mechanism is inconsistent with the claim language. POR, 49. But even if that was required, the coupling structures 26, 28 are part of the device coupler 16 (*delivery housing*). Ex. 1004, 4:55–48 (“**a device coupler 16 with one or more coupling structures 26, 28** engageable to the implant 2.”)

Spinelogik further argues that “coupling” only occurs upon the “*separate* act of locking the tool’s internal ‘inner shaft 42’ to the implant central opening 10.” POR, 49 (emphasis in original). This is inconsistent with the specification and the plain and ordinary meaning of “coupling.”

Spinelogik admits that the specification teaches that “delivery housing (610)” is “coupled” to the fusion member via retention rods 160. Ex. 1001, 11:29–33 (“four retention rods 160 ... *couple* the delivery housing 610 with the fusion member 120.”). Yet the *alignment* of the channels of the delivery mechanism and fusion

member does not occur upon the retention rods “locking” the delivery housing to the fusion member. Rather, the alignment occurs when the retention rods are coupled to the fusion member by inserting the rods into the channels of the fusion member, which joins the delivery mechanism and fusion member together and aligns the channels. Blain’s coupling of its delivery housing (device coupler 16) to the fusion member (implant 2) likewise causes the channel alignment, even though “locking” may occur later in some embodiments. Blain even describes structures 26, 28 as “*coupling* structures” or “*coupling* members,” undermining Spinelogik’s position. Ex. 1004, 4:55-58, 5:19-22. Indeed, Spinelogik fails to identify any embodiment in the ’805 Patent where the “locking” of the fusion member to the delivery mechanism/housing is what causes the channel alignment—the alignment results from the retention rods engaging the fusion member retention rod channels.

Additionally, the plain and ordinary meaning of “couple” is to “come together; unite” Ex. 1043, 4; Ex. 1044, 3; Ex. 1045, 3. This indisputably occurs when coupling members/structures 26, 28 of Blain’s coupling device 16 engage/join/mate with the openings of the fusion member, aligning the anchor member channels of the delivery mechanism and fusion member. Indeed, the specification of the ’805 Patent teaches degrees of coupling—“coupling” generally, “fully” coupled, and “fixedly” coupled. Ex. 1001, 2:35–39, 4:5–6, 12:7–15. Although “fixedly” coupling may require fully “locking” two components together, “coupling” does not.

Moreover, once the coupling members/structures 26, 28 are fully engaged with the fusion member openings, they are in fact *laterally* “secured” within those openings.

Lastly, even assuming that the “coupling” could somehow be interpreted to only occur upon “locking” of the device coupler 16 to the implant 2, Blain teaches that the coupling structure 28 may be a “snap-on” fitting, “friction” fitting or “magnetic” fitting, which means that simply inserting the coupling structure 28 into the central opening of the implant 2 simultaneously “aligns” the channels and “locks/secures” the delivery housing to the fusion member without “the separate act” of locking (e.g., by rotating to effectuate threaded engagement). Ex. 1004, 5:50–67.

E. Claims 6, 17

Spinelogik’s positions are premised on meritless claim interpretations.

“channel of the delivery mechanism”: There is no basis for requiring this channel to be part of a “a *single, integrated* structure containing channels for *both* the anchors (720) and retention rods (710).” POR, 52. Instrument guide 14 is indisputably a “delivery mechanism” that has a “channel.”

“channel of the fusion member”: There is no basis for requiring this channel to be “curved”—only claims 5 and 16 recite “curved.” *Id.*, 52–53.

“anchoring member”: There is no basis for interpreting “anchoring members” to exclude rotatable, threaded anchors (*id.*, 53)—something the specification itself teaches. Ex. 1001, 23:60–24:4.

The contention that the “claimed invention” requires a “*flexible, barbed pin* through a curved channel within an *integrated* housing” is also meritless. POR, 53.

F. Claim 12

Spinelogik admits the anchors 6 of Blain are threaded to the fusion member 2 and that the purpose of the anti-rotation mechanism is “***to prevent a threaded fastener (6) from unscrewing*** (i.e., counter-rotating) after it has been fully torqued into place” (POR, 55)—this necessarily “locks” the fasteners to the fusion member as claimed because reverse rotation is required to decouple. Moreover, the restraining plate of Blain-Bray (Ground 2) also “locks” the fusion member 2 and anchors 6 together. Pet., 68–70, 73–77. Spinelogik’s argument that “[t]he '805 patent claims a different structure for a different function” (POR, 55) is premised on pretending the claims require non-existent limitations (*e.g.*, non-threaded).

G. Claim 15

Spinelogik’s position that a “screw ***driver***” is not a “***driving*** member” is false (POR, 56)—the claim does not require any *particular type* of “driving” force (*e.g.*, linear or rotational) or “driving” tool (*e.g.*, impact, screw driver) or that the driving member be “decouplable.”

Even if “driving member” was limited to the impact-type, Globus is entitled to “argue and present evidence of anticipation or obviousness” to address this post-institution claim construction. *See Axonics, Inc. v. Medtronic, Inc.*, 75 F.4th 1374,

1384 (Fed. Cir. 2023). Ground 3 demonstrates that it would have been obvious to use an impact driving tool to drive the curved anchors of Blain-Steffee (with or without Bray). Pet., 90–91. Thus, Ground 3 additionally renders claim 15 unpatentable.

V. GROUND 2

A. Motivation to Combine

Spinelogik argues that the “sole reason” Globus proposes Blain-Bray is “for the ‘housing’ limitation.” POR, 60. That is incorrect. Globus explained that it would have been obvious to modify Blain to incorporate Bray’s (i) restraining plate and (ii) spherical anchor seat/screw head. Pet., 72–73.

Spinelogik further argues that “Petitioner provides no articulated reasoning explaining why a POSA would have been motivated *to add* Bray's *additional* restraining plate 60 to achieve the same anti-backout function.” POR, 61, 63. However, Globus explained that a POSA would have been motivated to use the restraining plate as an improved *alternative* (i.e., substitute) to the anti-rotation mechanism of Blain. Pet., 74–77. Spinelogik thus provides no rebuttal to Globus’ actual position.

Spinelogik’s purported distinction between the alleged “pre-implantation instrument guide” of Blain and “post-implantation restraining plate” of Bray is irrelevant. POR, 62. Blain’s anti-rotation mechanism and Bray’s restraining plate

are both part of their respective *fusion members* and act to lock structure in place after implant fixation. Pet., 73–75. It is thus untrue that they “address different procedural stages and serve different functions.” POR, 62.

B. Claims 1, 11 (“Preventing Decoupling”)

Blain teaches “preventing decoupling” (Claim 1.3/11.3) under Ground 1. Even if it did not, Grounds 2 and 3 show this limitation is met by Blain-Bray. Spinelogik’s position that “Bray’s restraining plate does not remedy Ground 1” is premised on improperly reading limitations into the claims (e.g., “unified delivery housing,” “push-in anchoring members,” “curved channels”). POR, 61–62.

C. Claim 12 (“Locking”)

Blain teaches “locking” under in Ground 1. Even if it did not, Blain-Bray (Grounds 2 and 3) discloses this limitation.

Spinelogik’s contrary position is premised on misrepresenting that Bray’s restraining plate is “in addition to” (rather than “an alternative to”) Blain’s anti-rotation mechanism and improperly reading limitations into the claim, such as “flanged” anchors. POR, 63.

The assertion that “Bray’s restraining plate serves the *same anti-rotation function* as Blain’s lobe-and-recess mechanism” is plainly false. Globus demonstrated that Bray’s restraining plate would be viewed as an *improvement* over Blain’s anti-rotation mechanism because it operates differently. Pet., 74.

VI. GROUND 3

Because Ground 1 met the institution threshold, the Institution Decision did not substantively address Ground 3, which demonstrates obviousness of the “curved” channel of claims 5 and 16. DI, 21. However, the Board addressed substantially similar obviousness arguments in its institution decision in the co-pending proceeding against related U.S. Patent No. 8,560,385, which has “curved channel” independent claims. Specifically, the Board determined that Globus had “shown sufficiently at this stage ... that a person of ordinary skill in the art would have had reason to” combine the curved anchors of Steffee with the interbody fusion implant of U.S. Patent No. 7,942,903 (“Moskowitz”), which is similar to Blain’s implant. IPR2025-00226, Paper 9 at 13–14, 17–18, 21.

A. Analogous Art

The specification teaches, and the claims are directed toward, “surgical procedures for *spinal fusion and stabilization*” (Ex. 1001, 1:19–21)—the same field as Steffee. Pet., 84–85 (citing Ex. 1002, ¶¶ 193-198); POR, 6. Indeed, Steffee is directed toward interbody fusion using anchors to fix graft between vertebrae, and the ’805 Patent is directed toward interbody fusion using anchors to fix an implant between vertebrae. Spinelogik tries to avoid this conclusion by limiting the field to interbody fusion implants to the exclusion of any other type of interbody fusion device for achieving interbody fusion. However, this narrow interpretation ignores

the “field of the invention” in the specification and the fact that Steffee—like the ’805 Patent—is specifically directed toward “interbody fusion.” *Unwired Planet, LLC v. Google Inc.*, 841 F.3d 995, 1001 (Fed. Cir. 2016) (“The field of endeavor of a patent is not limited to the specific point of novelty, the narrowest possible conception of the field, or the particular focus within a given field.”).

Steffee is also reasonably pertinent to the problems confronted by the ’805 inventor, *e.g.*, improving the reliability and success rate of interbody fusion. Pet., 84–85 (citing Ex. 1002 ¶¶193–198 and other evidence). Spinelogik provides no evidence to the contrary, instead offering only attorney-argument that Steffee is not pertinent because it addressed securing *bone graft* via anchors and the ’805 Patent addresses “securing an *implant* via anchoring members.” POR, 65. This is simply an argument that Steffee does not accomplish interbody fusion *in the same way* as the ’805 Patent—it says nothing about whether the same or similar *problems* are addressed by Steffee (*e.g.*, overcoming reliability issues, migration).

B. Motivation to Combine

Globus provided detailed, evidence-supported motivations to combine, including increasing implant stability and preventing implant migration. Pet., 84–91. Importantly, Spinelogik does not dispute that the curved anchors of Steffee would provide these benefits. Nor does Spinelogik provide *any* evidence to undermine Globus’s position. These motivations are thus un rebutted.

Spinelogik instead asserts “Petitioner provides *no motivation* for this substantial secondary modification” of modifying the curvature of Blain’s guide tubes 18 to accommodate curved anchors. POR, 67. Yet, Globus demonstrated that a POSA would have found it obvious (and in fact necessary) to make Blain’s guide tubes and implant channels “at least slightly curved to accommodate the curvature of the anchors” “to ensure that the rigid anchors did not become stuck or trapped.” Pet., 84–91. Spinelogik itself admits that such “jam[ming]” would have been an apparent concern absent this modification. POR, 67. Globus further pointed out that Blain teaches that its guide tubes “may be linear or *non-linear*” and that nonlinear guide tubes “may *facilitate access to difficult anatomical sites*,” providing further evidence of the obviousness of modifying the guide tubes. Petition, 88 (citing Ex. 1004, 8:8–16). Rather than rebutting these motivations, Spinelogik falsely argues that Globus provided “no motivation,” leaving these motivations unrebutted.

Spinelogik also suggests that the “impact-driven” nature of Steffee’s curved anchors might somehow nullify an obviousness determination. However, Globus explicitly addressed the obviousness of using an impact driving tool in the combination, which is supported by objective evidence including Blain’s own teaching that “screw drivers and *other tools* are known in the art and may be used with non-linear guide members.” Pet., 91 (citing Ex. 1002 ¶ 209; Ex. 1004, 8:13–16; Ex. 1036 ¶ [0142]). Steffee itself teaches using an impact tool for its anchors,

and it would be common sense to use an impact tool when those anchors are used with Blain's implant. Ex. 1016, 3:4-13.

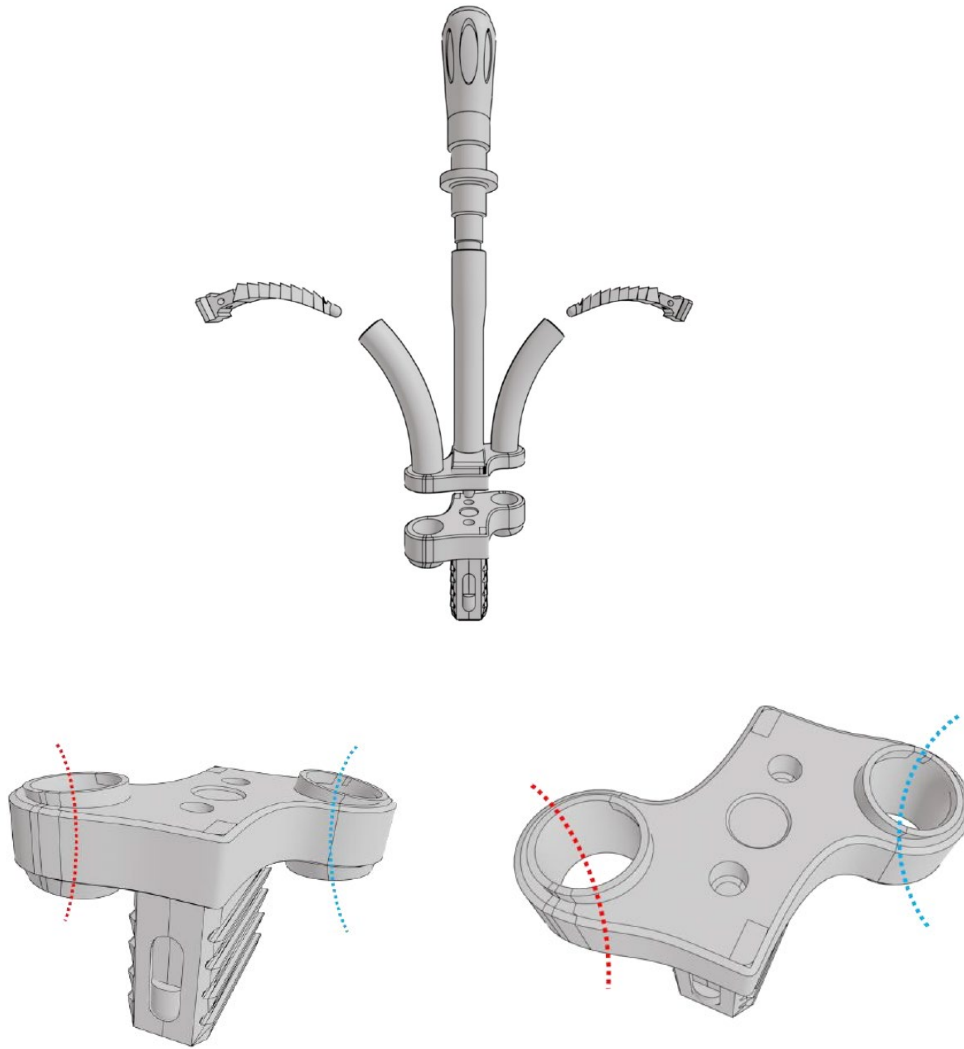
Spinelogik also argues there was no motivation to combine because Blain "already prevents backing out via anti-rotation." POR, 66–67. This ignores that the design of Steffee's curved anchors helps prevent them from pulling *out of the bone*. Pet., 86-88. The curved anchors thus provide improved attachment *to the bone*, rather than simply locking the fusion member and anchors together while leaving the anchors (and thus implant as a whole) more susceptible to loosening from the bone via migration. *Id.*

Spinelogik contends that Ground 3 constitutes "impermissible hindsight" and that "[n]o POSA would have been motivated to combine these disparate technologies." POR, 5. First, Spinelogik fails to provide any evidence regarding a POSA. Second, hindsight is negated by an appropriate motivation to combine—it is the "best defense" against hindsight. *In re Gartside*, 203 F.3d 1305, 1319 (Fed. Cir. 2000). This is especially true when the express teachings of the proposed combination suggest a motivation to combine. *Schwendimann v. Neenah, Inc.*, 82 F.4th 1371, 1381 (Fed. Cir. 2023). Not only does Globus provide detailed motivations to combine, but Steffee expressly states its anchor are "simple yet extremely effective" for interbody fusion, and Blain teaches using non-linear guide tubes. Petition, 86–88 (citing Ex. 1016, 2:29–33; Ex. 1004, 8-16).

There is no “inconsistency” between Grounds 2 and 3. POR, 68. Ground 2 proposes modifying: (1) Blain’s anchor channels 4 to have curved anchor *seats* as taught by Bray; and (2) replacing Blain’s anti-rotation mechanism with the restraining plate of Bray. Consequently, in the combination of Blain-Bray-Steffee, the implant *channels* are curved (per Steffee) and have anchor *seats* (per Bray). These grounds are not “mutually exclusive”—Ground 3 modifies the straight implant 4 and guide tube 18 channels of Blain-Bray (Ground 2) to be curved to accommodate Steffee’s curved anchors.

C. The Combination Possesses All Limitations

Globus demonstrated that it would have been obvious to combine Steffee’s curved anchors with Blain, which entails making basic mechanical-modifications to the guide tube channels 18 and implant anchor channels 4 to make them curved so that they can accommodate passage of the curved anchors as shown below. Pet., 85–90.



Consequently, in this obvious **combination** the channel is “curved” as claimed.

Spinelogik cannot dispute this, so it attacks the teachings of Steffee individually by arguing that **Steffee** does not teach “curved” channels as claimed. POR, 65–66. However, “[n]on-obviousness cannot be established by attacking references individually” when unpatentability “is based upon the teachings of a combination of references.” *Bradium Techs. LLC v. Iancu*, 923 F.3d 1032, 1050 (Fed. Cir. 2019).

D. Reasonable Expectation of Success

Spinelogik's position that the "proposed combination is technically impossible" (POR, 66) misrepresents the combination. Neither Globus nor Mr. Culbert asserted that "POSA would simply drive Steffee's *curved* fastener through" Blain's *straight* delivery tool. POR, 67. Instead, a POSA would have found it "necessary" to modify the guide tubes and implant channels of Blain to accommodate the curvature of Steffee's curved anchors, as shown in the images above. Pet., 88–91. Consequently, in the *actual* combination there is no risk of the curved fastener "jam[ming]." Indeed, this risk is one reason POSAs would have found this modification to be so obvious. Pet., 86–88.

Spinelogik's assertion that the combination requires "completely redesigning" Blain's implant and instrument guide is false. POR, 67–68. The combination only involves simple mechanical-design changes, and Globus provided three-dimensional drawings proving as much. Pet., 88–91. POSAs capable of designing Blain's system, which includes guide tubes and an implant with straight channels, would clearly be capable of slightly modifying the curvature of the channels to accommodate curved anchors.

Spinelogik also argues that that there is "no reasonable expectation of success" (POR, 69), but fails to identify any *legitimate* alleged deficiencies in the detailed arguments and evidence provided by the Petition and Mr. Culbert. Pet., 87–

91. Indeed, contrary to Spinelogik's conclusory assertions (POR, 69), Globus did explain both *why* and *how* a POSITA would (1) "abandon[] Blain's threaded screw" design, (2) modify Blain's straight guide channels to be curved, (3) modify Blain's implant channels to be curved, and (4) achieve more stable fixation via "curved geometry" channels. *Id.* Simply saying the opposite does not make it so.

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Respectfully submitted,

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CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITS

Pursuant to 37 C.F.R. § 42.24 *et seq.*, the undersigned certifies that this document complies with the type-volume limitations. This document, excluding those portions identified under § 42.24 (a)(1) (table of contents, table of authorities, mandatory notices under § 42.8, certificates of service and compliance with word count, appendix of exhibits, and claim listing) contains 5,577 words as calculated by the word processing program used in creating it.

/Stephen D. Zinda/

Stephen D. Zinda

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §§ 42.6(e)(4), the undersigned certifies that on February 3, 2026, a copy of the foregoing document (Petitioner's Reply to Patent Owner's Response, including all exhibits), was served via electronic mail on the following attorneys of record at the indicated e-mail address(es):

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