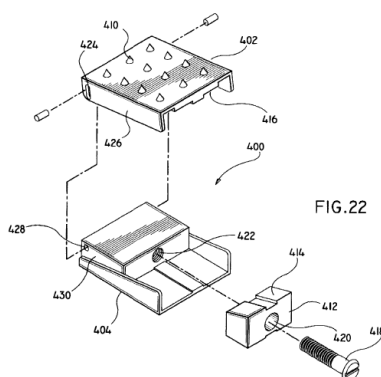
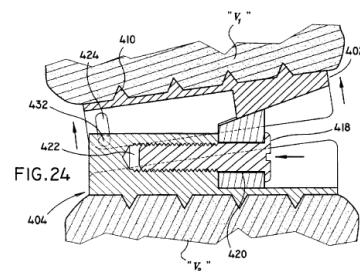
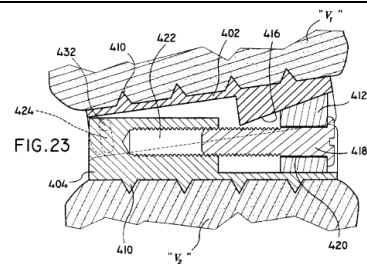


Ex. L3 – Invalidity of U.S. Patent No. 12,491,088 in view of Larsen, McLuen, and Gordon '026

U.S. Patent No. 5,782,832 to Larsen et al. (“Larsen”), in combination with U.S. Patent Application Publication No. 2006/0253201 A1 to McLuen et al. (“McLuen”) and U.S. Patent Application Publication No. 2005/0278026 A1 to Gordon et al. (“Gordon '026”), and/or in combination with other prior art identified in the cover pleading and/or discussed below, anticipates or renders obvious the asserted claims of U.S. Patent No. 12,491,088 (the “’088 Patent”). This chart applies an October 25, 2012 priority date for the ’088 Patent. Larsen issued on July 21, 1998, more than one year before that priority date, and therefore qualifies as prior art under pre-AIA 35 U.S.C. §§ 102(a) and (b). McLuen published on November 9, 2006, more than one year before the priority date, and therefore qualifies as prior art under pre-AIA 35 U.S.C. §§ 102(a) and (b). Gordon '026 published on December 15, 2005, more than one year before the priority date, and therefore qualifies as prior art under pre-AIA 35 U.S.C. §§ 102(a) and (b). Nothing in this chart should be construed as an admission of infringement or the correctness of Moskowitz’s interpretation of the claims as reflected in the infringement contentions. This chart further relies on WO2010141910A2 to Davis (“Davis”) as disclosing the use of fluoroscopy for monitoring the implantation of expanding spinal implants. Davis was published Dec. 9, 2010 and is prior art under pre-AIA 35 U.S.C. § 102(b).

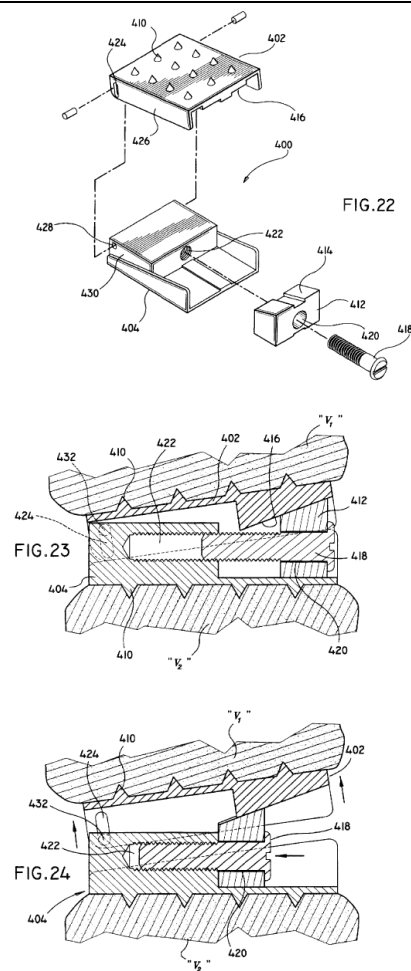
Claims	Exemplary Citations to Prior Art
Claim 1	
[1A] An expandable spinal spacer device comprising: a first body comprising a first bone-interfacing surface;	To the extent the preamble is limiting, Larsen discloses an “expandable spinal spacer device”. Larsen’s implant 400 is an expandable spinal implant for insertion within an intervertebral space defined between adjacent vertebrae and is used for spinal fusion; it is expandable because rotation of screw 418 advances camming block 412 to displace upper support member 402 from lower support member 404, moving the implant between a closed and an “expanded configuration”. Larsen further discloses upper support member 402, which is a “first body” comprising a “first bone-interfacing surface”. The “first bone-interfacing surface” is contacting surface 406 on the outward-facing side of upper support member 402, which carries pyramid-shaped projections 410 that engage the adjacent vertebra (a “spinal bone”). See Larsen at Title; Abstract; 8:8–47; Figs. 21–24. 



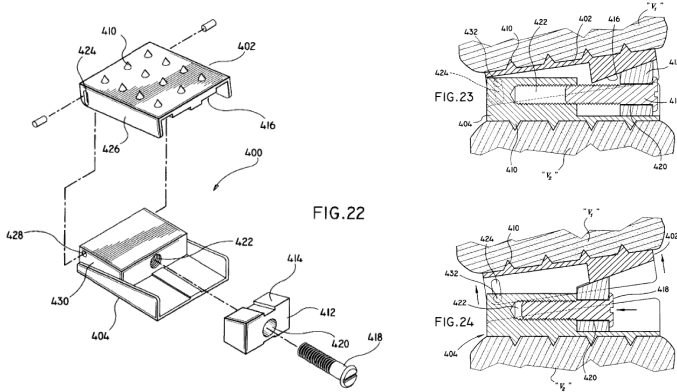
To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.

[1B] a second body comprising a second bone-interfacing surface, the second body coupled to the first body, wherein the first body and the second body are configured to be movable relative to one another from a first compressed configuration to a second expanded configuration;

Larsen discloses lower support member 404, which is a “second body” comprising a “second bone-interfacing surface”, the “second body” coupled to the “first body”, wherein the “first body” and the “second body” are configured to be movable relative to one another from a “first compressed configuration” to a “second expanded configuration”. The “second bone-interfacing surface” is contacting surface 408 on the outward-facing side of lower support member 404, carrying pyramid-shaped projections 410 that engage the adjacent vertebra. Lower support member 404 is coupled to upper support member 402 through pin 432, which passes through slots 424 in side plates 426 (of 402) and apertures 428 in side plates 430 (of 404). Larsen expressly states that rotation of screw 418 in a clockwise direction causes the screw to advance within threaded bore 422 thereby advancing camming block 412 in the direction indicated by the directional arrow in FIG. 24 and displacing upper support member 402 from lower support member 404, so the two support members are movable relative to one another from a “first compressed configuration” (implant 400 closed) to a “second expanded configuration” (upper support member 402 lifted away from lower support member 404). See Larsen at 8:8–47; Figs. 21–24.

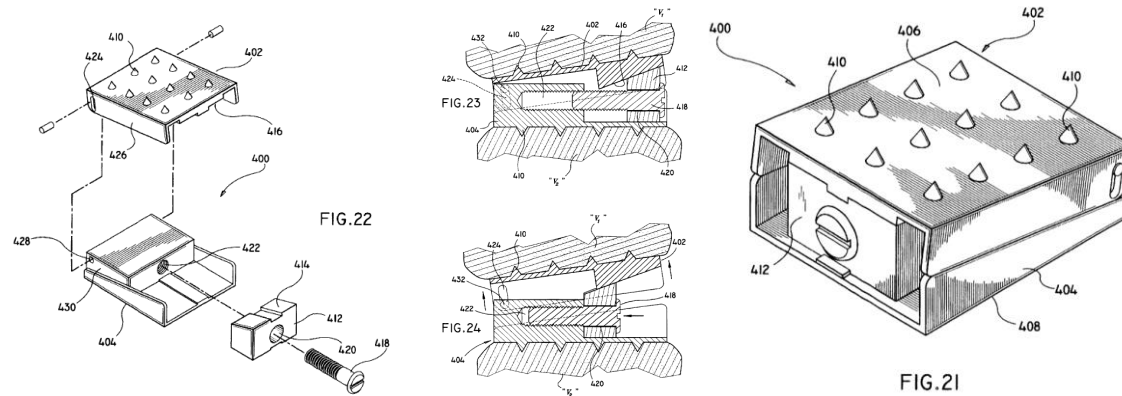


To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.

[1C] a wedge positioned between the first body and the second body, the wedge comprising: at least one angled surface formed relative to a longitudinal axis of the wedge, the at least one angled surface positioned against an internal surface of one of the first body and the second body; and	Larsen discloses camming block 412, which is a wedge positioned between the “first body” and the “second body”, the wedge comprising “at least one angled surface” formed relative to a “longitudinal axis of the wedge”, the “at least one angled surface” positioned against an “internal surface” of one of the “first body” and the “second body”. Camming block 412 defines inclined camming surface 414, which is an “at least one angled surface” formed relative to the “longitudinal axis” of camming block 412. Camming block 412 is accommodated within the interior of implant 400, between upper support member 402 (the “first body”) and lower support member 404 (the “second body”), with inclined camming surface 414 positioned against inwardly-facing surface 416 of upper support member 402 (the “internal surface” of the “first body”). Larsen expressly states that inclined camming surface 414 “engages a correspondingly dimensioned inner surface 416 of support member 402.” Larsen at 8:23–24; see also <i>id.</i> at 8:8–47; Figs. 21–24.  FIG. 22 is a perspective view of an implant 400 showing an upper support member 402 and a lower support member 404. A camming block 412 is positioned between them. The camming block 412 has an inclined camming surface 414 that engages an inwardly-facing surface 416 of the upper support member 402. Other components labeled include 410, 424, 426, 428, 430, 404, 418, and 420. FIG. 23 and FIG. 24 are cross-sectional views of the implant 400. FIG. 23 shows the camming block 412 in a first position, and FIG. 24 shows it in a second position, moved towards the right as indicated by an arrow. The camming surface 414 of the block 412 is shown engaging the surface 416 of the upper support member 402. Other components labeled include 432, 410, 422, 402, 416, 412, 418, 404, 414, 420, and 424. To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
[1D] a threaded screw portion aligned with the longitudinal axis of the wedge; wherein the first body and the second body are movable relative to one another by actuation of the wedge caused by rotation of a tool in the threaded	Larsen discloses a “threaded screw portion” aligned with the “longitudinal axis of the wedge”, wherein the “first body” and the “second body” are movable relative to one another by actuation of the wedge via a tool engaging the “threaded screw portion”. Screw 418 defines an externally threaded shaft that passes through a bore in camming block 412 and threadably engages internal threaded bore 422 of lower support member 404; the threaded shaft of screw 418 is coaxial with the “longitudinal axis” of camming block 412. Larsen expressly states that rotation of screw 418 in a clockwise direction causes the screw to advance within threaded bore 422 thereby advancing camming block 412 in the direction indicated by the directional arrow

screw portion, wherein the expandable spinal spacer device is configured to be inserted into a spine of a patient when the first body and the second body are in the first compressed configuration;

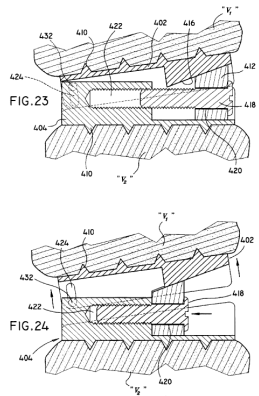
in FIG. 24 and displacing upper support member 402 from lower support member 404. A POSITA would understand that the disclosed screw would necessarily be rotated by a tool. See, e.g., McLuen at [0076]; Gordon at [0226]. Screw 418 includes a drive feature at its “proximal end” to receive a rotating tool, and Larsen expressly describes insertion of its implants into the intervertebral space using a “grasping instrument,” so a tool engages the “threaded screw portion” to actuate the wedge. See Larsen at 5:38-44; 8:8-47; Figs. 21-24. Larsen further discloses that the expandable devices described therein are configured to be inserted into the spine when in the compressed condition, then expanded, because “[i]n the collapsed condition, implant 100 presents a reduced profile which facilitates its insertion.” See id. at 5:38-58. A POSITA would understand that this teaching applies to all expandable embodiments in Larsen, including the one depicted in Figs. 21-24.

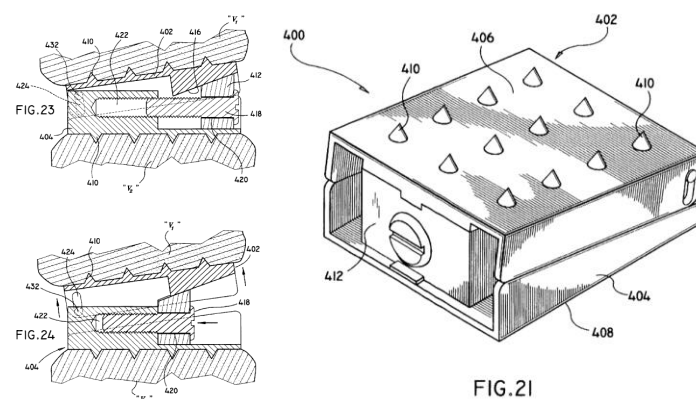


To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8-47; Figs. 21-24; McLuen ¶¶ [0075]-[0078]; Figs. 15-17; Gordon '026 ¶¶ [0226]-[0238]; Figs. 35-38.

[1E] wherein the first and second bone-interfacing surfaces are each sized and shaped to engage a spinal bone of a patient when the first body and the second body are in the second expanded configuration.

Larsen discloses that the “first and second bone-interfacing surfaces” are each sized and shaped to engage a “spinal bone” of a patient when the “first body” and the “second body” are in the “second expanded configuration”. Contacting surfaces 406 and 408 of upper support member 402 and lower support member 404 are outwardly directed and carry pyramid-shaped projections 410 sized to engage the vertebral endplates. Larsen expressly describes implant 400 as an implant for insertion within an intervertebral space defined between adjacent vertebrae ‘V1, V2’ for supporting the vertebrae in predetermined spaced relation during healing, so when camming block 412 advances and the support members move to the “second expanded

	configuration”, contacting surfaces 406 and 408 engage the spinal bones V1 and V2. See Larsen at 8:8–47; Figs. 21–24.  To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
Claim 2	
[2] The expandable spinal spacer device of claim 1, wherein the wedge is configured to be moved within a space between the first body and the second body when the tool is rotated in the threaded screw portion.	Claim 2 depends from Claim 1. Larsen discloses all limitations of Claim 1 as shown above. Larsen also discloses that the wedge is configured to be moved within a space between the “first body” and the “second body” when the tool is rotated in the “threaded screw portion”. Larsen expressly states that rotation of screw 418 in a clockwise direction causes the screw to advance within threaded bore 422 thereby advancing camming block 412 in the direction indicated by the directional arrow in FIG. 24. A tool engaging screw 418 at its drive end necessarily rotates screw 418, which in turn advances camming block 412 (the wedge) axially within the space between upper support member 402 and lower support member 404. See Larsen at 8:8–47; Figs. 21–24; McLuen at [0076]; Gordon at [0226].



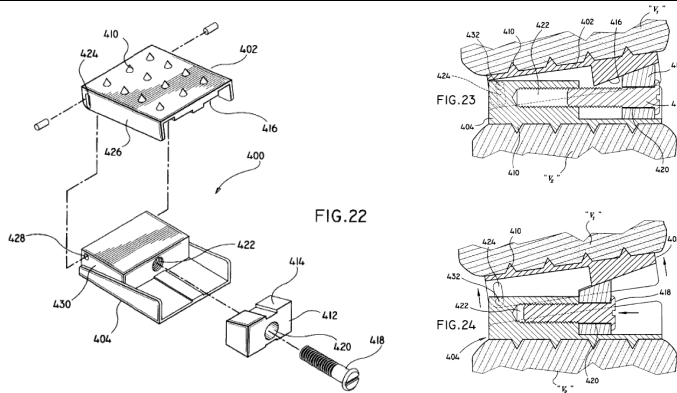
To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.

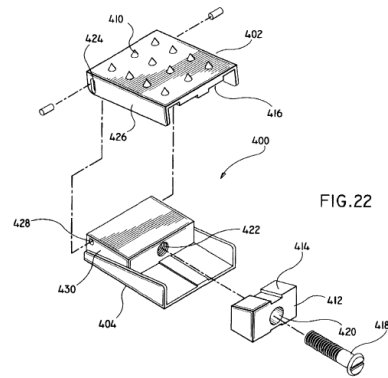
Claim 3

[3] The expandable spinal spacer device of claim 2, wherein the wedge comprises two angled surfaces, the two angled surfaces comprising a first angled surface positioned against a first internal surface of the first body and a second angled surface positioned against a second internal surface of the second body.

Claim 3 depends from Claim 2. Larsen discloses all limitations of Claim 2 as shown above.

Larsen discloses that the wedge comprises “two angled surfaces”, the “two angled surfaces” comprising a “first angled surface” positioned against a “first internal surface” of the “first body” and a “second angled surface” positioned against a “second internal surface” of the “second body”. Camming block 412 rides within the interior space between upper support member 402 and lower support member 404; inclined camming surface 414 engages inwardly-facing surface 416 of upper support member 402 (a “first angled surface” positioned against a “first internal surface” of the “first body”), and the opposite axial face of camming block 412 rides along the corresponding interior surface of lower support member 404 (a “second angled surface” positioned against a “second internal surface” of the “second body”). Figures 21–24 depict camming block 412 as a wedge-shaped block with inclined faces on both sides that cooperate with correspondingly “angled surfaces” of the support members to translate axial motion into vertical displacement. See Larsen at 8:8–47; Figs. 21–24.

	 FIG. 22 FIG. 23 FIG. 24 To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
Claim 4 [4] The expandable spinal spacer device of claim 2, wherein the first and second bodies are coupled by at least one pin.	Claim 4 depends from Claim 2. Larsen discloses all limitations of Claim 2 as shown above. Larsen also discloses that the “first and second bodies” are coupled by “at least one pin”. Upper support member 402 and lower support member 404 are coupled through a pin-and-slot arrangement: side plates 426 of upper support member 402 contain transversely extending slots 424, side plates 430 of lower support member 404 contain correspondingly positioned apertures 428, and a pin 432 traverses each slot-and-aperture pair to couple the support members. See Larsen at 8:8–47; Figs. 21–24.



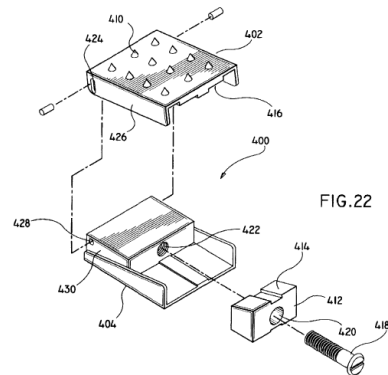
To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.

Claim 5

[5] The expandable spinal spacer device of claim 4, wherein the first and second bodies are coupled by two pins.

Claim 5 depends from Claim 4. Larsen discloses all limitations of Claim 4 as shown above.

Larsen discloses that the “first and second bodies” are coupled by “two pins”. Larsen expressly describes the pin-and-slot arrangement as including a pin 432 passing through slots 424 and apertures 428 on each side of implant 400; one pin 432 is provided on each side of the implant so that “two pins” jointly couple the support members. See Larsen at 8:8–47; Figs. 21–24.

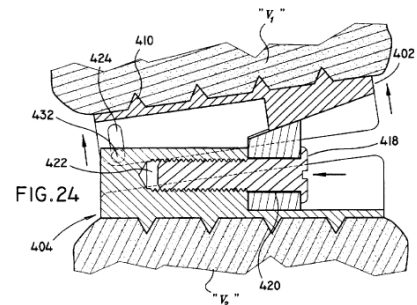
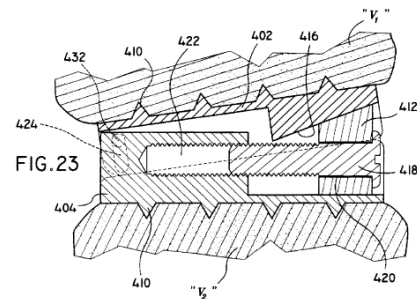


	Alternatively, under the swapped body assignment, the same “two pins” 432 couple lower support member 404 (the “first body”) to upper support member 402 (the “second body”). See Larsen at 8:8–47; Figs. 21–24. To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
Claim 6	
[6] The expandable spinal spacer device of claim 5, wherein the first and second bodies are configured to rotate in opposite directions about an axis of each of the two pins.	Claim 6 depends from Claim 5. Larsen discloses all limitations of Claim 5 as shown above. Larsen discloses that the “first and second bodies” are configured to rotate in opposite directions about an axis of each of the “two pins”. Because upper support member 402 is hingedly coupled to lower support member 404 at pins 432, when camming block 412 advances and forces upper support member 402 upward, upper support member 402 rotates about the axis of pins 432 in one direction, while lower support member 404 remains generally stationary or rotates opposite relative to upper support member 402 about the same pin axis. See Larsen at 8:8–47; Figs. 21–24. To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
Claim 7	

[7] The expandable spinal spacer device of claim 4, wherein when the wedge is moved within the space between the first body and the second body by rotation of the tool in the threaded screw portion, the at least one angled surface contacts at least one of the first body and the second body, rotating the at least one of the first body and the second body about an axis of the at least one pin.

Claim 7 depends from Claim 4. Larsen discloses all limitations of Claim 4 as shown above.

Larsen discloses that when the wedge is moved within the space between the “first body” and the “second body” by rotation of the tool in the “threaded screw portion”, a distance between the “first body” and the “second body” on one side of the “two pins” increases while remaining substantially constant on the other side of the “two pins”. Because pins 432 act as a hinge pivot at the first end of implant 400, when camming block 412 advances toward the free (opposite) end and bears against inwardly-facing surface 416 of upper support member 402, upper support member 402 pivots about pins 432; on the free-end side of pins 432 the gap between upper support member 402 and lower support member 404 increases, while on the hinged side of pins 432 the gap remains substantially constant. Figures 21–24 depict implant 400 expanding to form a wedge-shaped gap opening away from the hinge at pins 432. See Larsen at 8:8–47; Figs. 21–24.



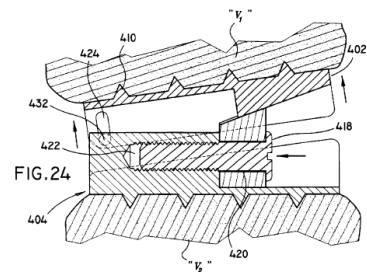
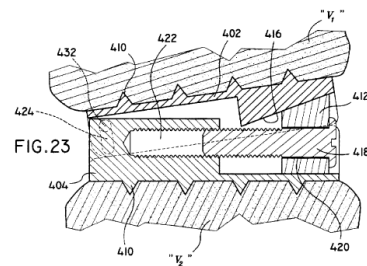
To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.

Claim 8

[8] The expandable spinal spacer device of claim 1, wherein a relative angular orientation of the first body and the second body can be controlled by rotation of the tool in the threaded screw portion.

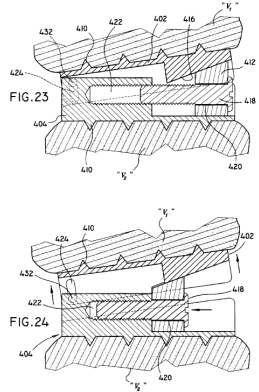
Claim 8 depends from Claim 1. Larsen discloses all limitations of Claim 1 as shown above.

Larsen discloses that a relative angular orientation of the “first body” and the “second body” can be controlled by rotation of the tool in the “threaded screw portion”. Because screw 418 threadably engages internal threaded bore 422 and advances camming block 412 by a predictable axial increment per turn, the degree to which upper support member 402 is pivoted relative to lower support member 404 (i.e., the relative angular orientation of the support members about pins 432) is directly controlled by the rotational angle of screw 418. A tool engaging the drive end of screw 418 can therefore set and control the relative angular orientation of the “first and second bodies” by rotating screw 418 to the desired position. See Larsen at 8:8–47; Figs. 21–24.



To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.

Claim 9

[9] The expandable spinal spacer device of claim 8, wherein rotation of the tool in the threaded screw portion controls a distance traveled by the wedge within a space between the first body and the second body.	Claim 9 depends from Claim 8. Larsen discloses all limitations of Claim 8 as shown above. Larsen discloses that rotation of the tool in the “threaded screw portion” controls a distance traveled by the wedge within a space between the “first body” and the “second body”, and thereby controls the relative angular orientation. Because screw 418 threadably engages internal threaded bore 422 with a known thread pitch, each rotation of screw 418 advances camming block 412 a predictable axial distance within the space between upper support member 402 and lower support member 404; the distance traveled by camming block 412 in turn determines how far upper support member 402 is pivoted relative to lower support member 404 about pins 432 (the relative angular orientation). See Larsen at 8:8–47; Figs. 21–24.  To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
Claim 10	
[10] The expandable spinal spacer device of claim 1, wherein the first and second bone-interfacing surfaces each comprises at least one feature configured to engage the spinal bone of the patient when the first body and the second body	Claim 10 depends from Claim 1. Larsen discloses all limitations of Claim 1 as shown above. Larsen discloses that the “first and second bone-interfacing surfaces” each comprises at least one feature configured to engage the “spinal bone” of the patient. Contacting surface 406 of upper support member 402 and contacting surface 408 of lower support member 404 each carry outwardly directed pyramid-shaped projections 410, which are features configured to engage the adjacent vertebral endplate (a “spinal bone” of the patient). See Larsen at 8:8–47; Figs. 21–24.

are in the second expanded configuration.	FIG. 21 To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
Claim 13	
[13] The expandable spinal spacer device of claim 1, wherein the expandable spinal spacer device is configured to be implanted in a lumbar region of the spine of the patient.	Claim 13 depends from Claim 1. Larsen discloses all limitations of Claim 1 as shown above. Larsen discloses that the “expandable spinal spacer device” is configured to be implanted in a “lumbar region” of the spine of the patient. Larsen describes its implants as suitable for insertion within an intervertebral space of the spine for supporting the vertebrae during healing, and discusses use of intervertebral implants in spinal fusion procedures that commonly include the “lumbar region”. The implant 400 embodiment of Figs. 21–24 is sized and shaped for intervertebral use in the spine, including the “lumbar region”. See Larsen at Title, Other Publications (multiple references to lumbar fusion); Background of the Related Art; 1:63-2:23; 8:8–47; Figs. 21–24. To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
Claim 14	
[14A] An expandable spinal spacer system comprising:	See discussion above with respect to claim limitation [1A].

a spacer device comprising: a first body comprising a first bone-interfacing surface;	
[14B] a second body comprising a second bone-interfacing surface, the second body coupled to the first body, wherein the first body and the second body are configured to be movable relative to one another from a first compressed configuration to a second expanded configuration; and	See discussion above with respect to claim limitation [1B].
[14C] a wedge positioned between the first body and the second body, the wedge comprising: at least one angled surface formed relative to a longitudinal axis of the wedge, the at least one angled surface positioned against an internal surface of one of the first body and the second body; and	See discussion above with respect to claim limitation [1C].
[14D] a threaded screw portion aligned with the longitudinal axis of the wedge; and	See discussion above with respect to claim limitation [1D].
[14E] two or more indentations formed in the spacer device, wherein the two or more indentations comprise a first indentation formed on a first side of the spacer device and a second	To the extent Larsen does not expressly disclose “two or more indentations” formed in the “spacer device”, wherein the “two or more indentations” comprise a “first indentation” formed on a “first side of the spacer device” and a “second indentation” formed on a “second side of the spacer device”, the second side being opposite the first side about the “longitudinal axis of the wedge”, McLuen discloses channels 1522, which are “two or more indentations” formed in the “spacer device”. McLuen expressly describes “channels 1522 [that] are implemented to receive a tool,” with attachments that fit within the channels 1522 to secure the tool in

indentation formed on a second side of the spacer device, the second side being opposite the first side about the longitudinal axis of the wedge; and

place. Figures 15–18B of McLuen depict channels 1522 as recessed features on opposite lateral sides of bone fusion device 1500, with one “channel” 1522 on a first side of the device and another “channel” 1522 on the opposite second side, arranged symmetrically about the “longitudinal axis” of the device (which is the “longitudinal axis of the wedge”/drive screw). See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17.

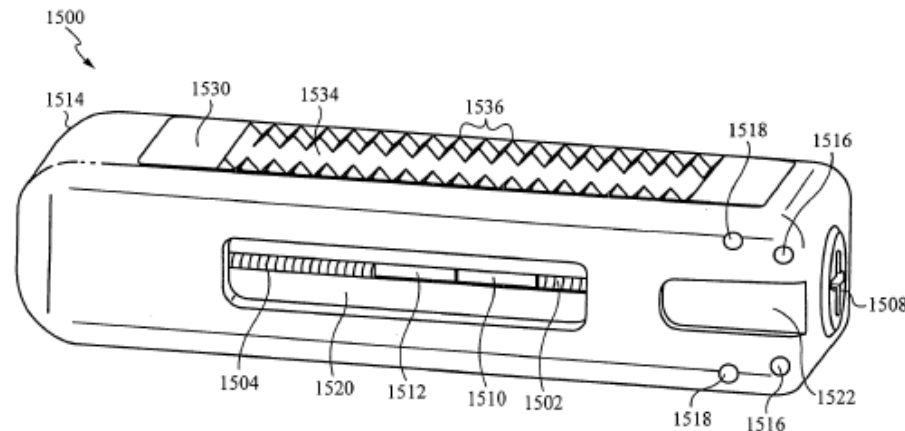
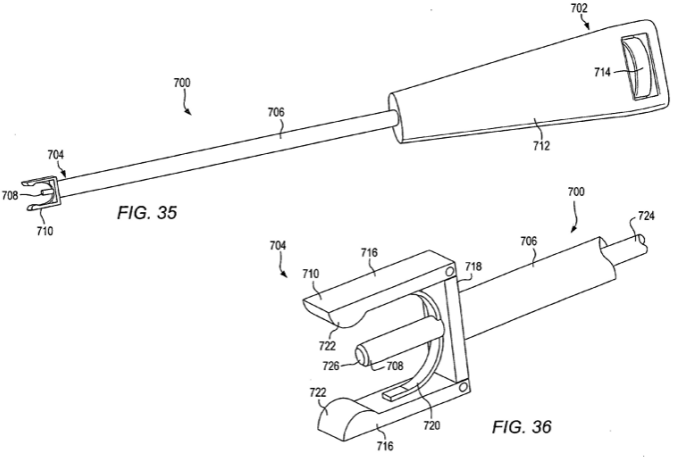


Fig. 16

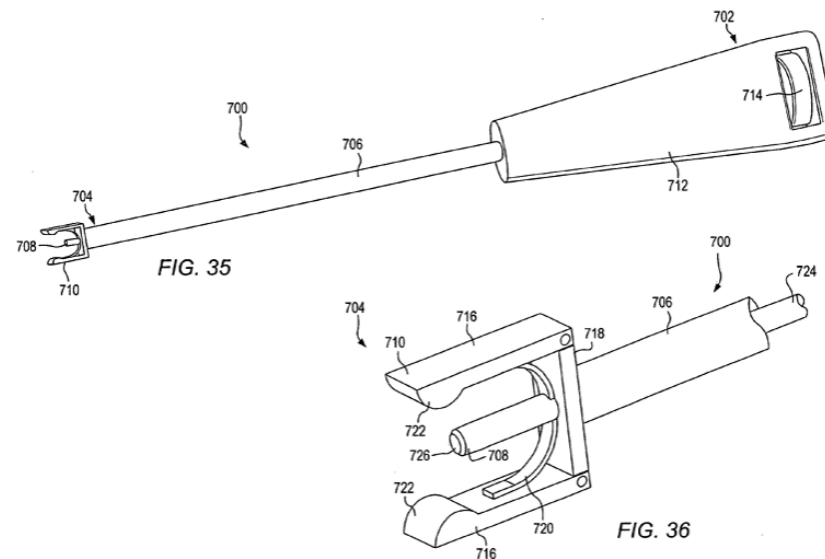
A person of ordinary skill in the art would have found it obvious to modify Larsen’s implant 400 to incorporate “indentations” as taught by McLuen for multiple independent reasons including: (1) combining the known element of Larsen’s expandable intervertebral implant with the known element of McLuen’s tool-receiving channels 1522 constitutes combining prior art elements according to known methods to yield entirely predictable results, namely providing a secure, non-slip engagement between an insertion tool and the expandable implant during surgical delivery; (2) McLuen’s channels 1522 are a known technique used to improve expandable spinal fusion devices by preventing the tool from slipping during insertion and expansion, and applying that known technique to Larsen’s implant 400 would improve it in the same way — McLuen demonstrates the technique works on a structurally similar expandable spinal implant; (3) Larsen’s implant 400 is a known expandable spinal implant ready for improvement, and McLuen’s channels 1522 provide the known improvement of tool-engagement “indentations”, yielding the predictable result of secure tool engagement during insertion and expansion; and (4) a person of ordinary skill would have been motivated to look to McLuen because McLuen and Larsen are in the same field of expandable spinal/intervertebral fusion implants, both address the common problem of securely handling and deploying

	such implants with surgical instruments, and McLuen expressly discloses that its channels 1522 prevent tool slippage during rotation of the screw — a concern directly applicable to Larsen’s screw-actuated camming design. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17. To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon ’026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon ’026 or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon ’026 ¶¶ [0226]–[0238]; Figs. 35–38.
[14F] a tool system for implantation of the spacer device, the tool system comprising: a first tool comprising: a first elongate shaft extending from a proximal end to a distal end, the first elongate shaft defining a channel from the proximal end to the distal end;	Gordon ’026 discloses a “tool system” for implantation of the “spacer device”, including a “first tool” comprising a “first elongate shaft” extending from a “proximal end” to a “distal end”, the “first elongate shaft” defining a “channel” from the “proximal end” to the “distal end”. Gordon ’026 describes “instrument 700 for use in installing and expanding an implant” (Gordon ’026 ¶ [0227]), having “proximal end 702 and distal end 704” (Gordon ’026 ¶ [0227]) and including “outer shaft 706, driver 708, holding device 710, and handle 712” (Gordon ’026 ¶ [0227]; Fig. 35). Outer shaft 706 of Gordon’s instrument 700 is the claimed “first elongate shaft” — a hollow elongate member that extends from the proximal handle 712 to the distal holding device 710 and defines an internal channel along its longitudinal axis. Gordon ’026 expressly confirms that “Base 718 of holding device 710 may allow for passage of driver 708” (Gordon ’026 ¶ [0233]; Fig. 36), and further discloses that “Driver 708 may include inner shaft 724 and driver head 726” (Gordon ’026 ¶ [0233]; Fig. 36) — demonstrating that outer shaft 706 defines a “channel” extending from the proximal end to the distal end through which the inner driver shaft 724 passes. Gordon ’026 ¶¶ [0226]–[0238]; Figs. 35–38. 

	To the extent Larsen and/or McLuen do not expressly disclose this “tool system” limitation, it would have been obvious to a person of ordinary skill in the art at the relevant time to combine the expandable spacer device of Larsen and/or McLuen with the installation/expansion instrument of Gordon ’026, because Gordon expressly discloses that its “instrument 700” is suited to “install” and “expand” an expandable intervertebral implant — the very implantation function recited in claim 14. A skilled artisan designing a tool system for delivering and expanding the Larsen/McLuen expandable spacer would have looked to Gordon’s elongate-outer-shaft-with-internal-driver instrument as a known, predictable solution to the known problem of delivering an expandable spacer to an intervertebral space and actuating its expansion mechanism. The combination is no more than the use of a known technique (Gordon’s instrument 700 with hollow outer shaft 706 and through-passing driver 708) to improve a similar device (the Larsen/McLuen expandable spacer) in the same way, and yields nothing more than predictable results. Gordon ’026 ¶¶ [0226]–[0238]; Figs. 35–38; Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17. To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon ’026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon ’026 or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation. Gordon ’026 ¶¶ [0226]–[0238]; Figs. 35–38; Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17.
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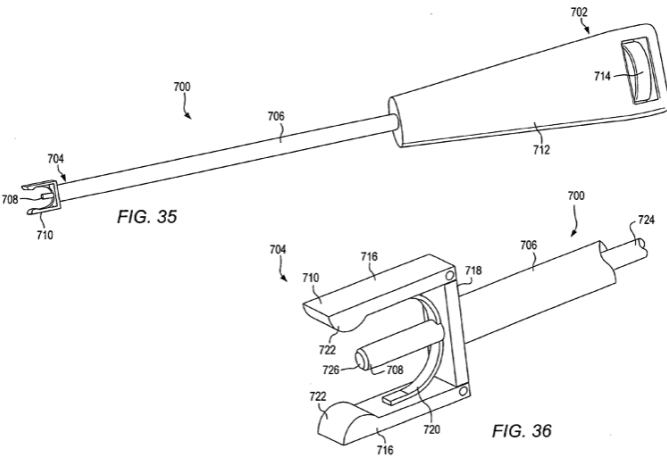
[14G] first and second prongs positioned at the distal end of the first elongate shaft, the first and second prongs sized and positioned such that the first and second prongs engage the two or more indentations formed in the spacer device when the first tool engages the spacer device, the first and second prongs configured to hold the spacer device during delivery of the spacer device into a space between adjacent bones of a patient's spine;

To the extent Larsen does not expressly disclose “first and second prongs” positioned at the “distal end” of the “first elongate shaft”, the “first and second prongs” sized and positioned such that the “first and second prongs” engage the “two or more indentations” formed in the “spacer device” when the “first tool” engages the “spacer device”, the “first and second prongs” configured to hold the “spacer device” during delivery of the “spacer device” into a space between “adjacent bones” of a patient's spine, Gordon '026 discloses prongs 722 positioned at the “distal end” of the elongate shaft of instrument 700. Gordon '026 discloses that instrument 700 includes a holding device at its “distal end” with “first and second prongs” 722 that grip opposite lateral sides of an expandable spinal implant, allowing the surgeon to hold and deliver the implant into the intervertebral space between adjacent vertebrae. Prongs 722 are sized and positioned to fit into tool-engagement recesses on opposite lateral sides of the implant and hold it during delivery into the intervertebral space. See Larsen at 8:8–47; Figs. 21–24; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.

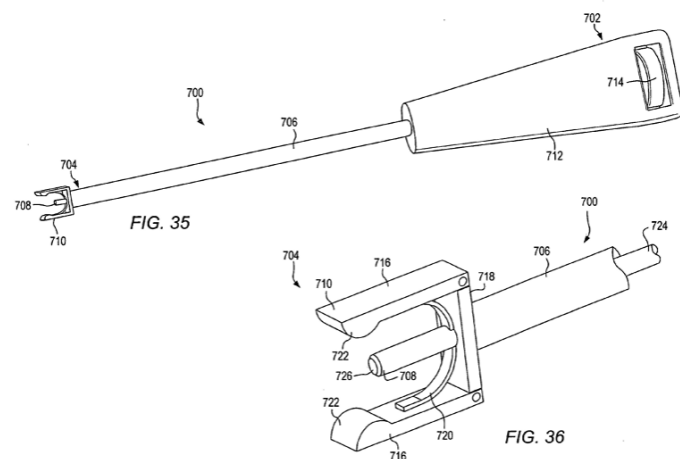


A person of ordinary skill in the art would have found it obvious to use Gordon's tool system with a Larsen implant modified to include McLuen's slots for the reasons stated above with respect to claim limitation [14F]. Further: (1) combining the known element of Larsen's expandable implant delivered by a grasping instrument with the known element of Gordon '026's prongs 722 constitutes combining prior art elements according to known methods to yield entirely predictable results, namely a secure two-point lateral grip on the implant for controlled intervertebral delivery; (2) Gordon '026's prongs 722 are a known technique used

	to improve insertion instruments for expandable spinal implants by providing precise, non-slip grip on the implant during delivery, and applying that known technique to Larsen’s grasping instrument would improve it in the same way — Gordon ’026 demonstrates the technique works on a structurally similar expandable spinal implant; (3) Larsen’s implant 400 and its accompanying grasping instrument form a known delivery system ready for improvement, and Gordon ’026’s tool system, complete with prongs 722, provides the known improvement of precise lateral indentation-engaging prongs, yielding the predictable result of controlled delivery of the implant between vertebrae; and (4) a person of ordinary skill would have been motivated to look to Gordon ’026 because Gordon ’026 and Larsen are in the same field of expandable spinal implants and their delivery instrumentation, both address the common problem of delivering a compact implant into the intervertebral space and expanding it in situ, and Gordon ’026 expressly discloses that its prongs 722 hold the implant during insertion and that the driver passes through the same instrument to actuate expansion — a combined function that Larsen’s screw-actuated implant directly needs. See Larsen at 5:38-46, 8:8-47; Figs. 21-24; McLuen ¶¶ [0075]–[0078]; Figs. 15-17; Gordon ’026 ¶¶ [0226]–[0238]; Figs. 35-38. To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon ’026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon ’026 or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8-47; Figs. 21-24; McLuen ¶¶ [0075]–[0078]; Figs. 15-17; Gordon ’026 ¶¶ [0226]–[0238]; Figs. 35-38.
[14H] a second tool comprising: a second elongate shaft sized and configured to extend through the channel defined by the first tool; and	To the extent Larsen does not expressly disclose a “second tool” comprising a “second elongate shaft” sized and configured to extend through the “channel” defined by the “first tool”, Gordon does. Gordon’s driver 708, which may include inner shaft 724 and driver head 726, constitutes a second tool having a second elongate shaft sized and configured to extend through the channel defined by outer shaft 206. Gordon ’026 ¶¶ [0226]–[0238]; Figs. 35-38. A person of ordinary skill in the art would be motivated to apply Gordon’s tool system, including its first and second tools, to the device of Larsen, modified to include the indentations of McLuen, for the reasons set forth above with respect to claim limitations [14F] and [14G]. In particular, Gordon is directed to expandable spinal implants, just like Larsen, and is thus a logical tool to use with the expandable spinal implant of Larsen. This reasoning applies to both the first tool, which holds the device in place via its prongs, and the second tool, which is what serves to rotate the screw in order to expand the device.

	 FIG. 35 FIG. 36 To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
[14I] a screwdriver end positioned at a distal end of the second elongate shaft, the screwdriver end configured to engage with the threaded screw portion of the spacer device when the second tool is positioned within the channel defined by the first tool, and while the spacer device is engaged by the first and second prongs, the screwdriver end sized and configured to operate the threaded screw portion of the spacer device;	As discussed above, Larsen discloses an interbody device having an expansion mechanism driven by the turning of a screw, and the combination of Larsen with McLuen adds slots to that interbody device that can engage with the prongs of a tool. Gordon, in turn, discloses “a screwdriver end positioned at a distal end of the second elongate shaft, the screwdriver end configured to engage with the threaded screw portion of the spacer device when the second tool is positioned within the channel defined by the first tool.” See Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38. Gordon states specifically that driver head 726 may take a “Phillips” form, which is a reference to a screwdriver shape, and “[i]n some embodiments, the driver head may engage a set screw in the implant.” Gordon at [0233]. In the proposed Larsen-McLuen-Gordon combination, Gordon's screwdriver end of driver 708 is sized and configured to operate the threaded screw portion of the spacer device (the drive end of Larsen's screw 418) while driver 708 is positioned within the channel of Gordon's outer shaft 706 and while the McLuen indentations on the Larsen device are engaged by the first and second prongs of Gordon's tool system. This

combination and operation would be obvious to a person of skill in the art for the reasons discussed above with respect to claim limitations [14F]-[14[H].

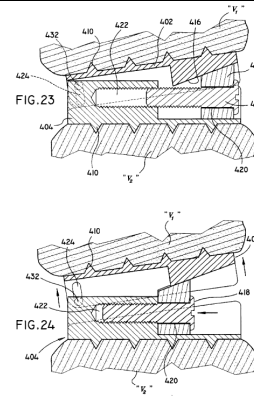


To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8-47; Figs. 21-24; McLuen ¶¶ [0075]-[0078]; Figs. 15-17; Gordon '026 ¶¶ [0226]-[0238]; Figs. 35-38.

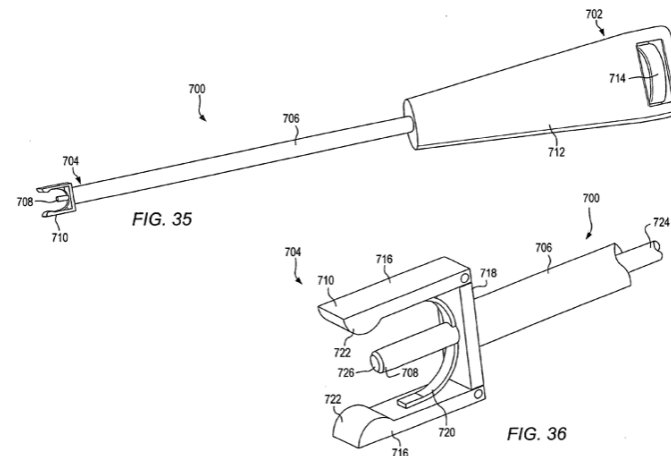
[14J] wherein the first and second bodies of the spacer device are configured to be expanded from the first compressed configuration to the second expanded configuration by rotation of the screwdriver end of the second tool by rotation of the second elongate shaft of the second tool within the channel defined by the first tool, wherein the first and second bodies are expanded to engage the

Larsen discloses that the "first and second bodies" of the "spacer device" are configured to be expanded from the "first compressed configuration" to the "second expanded configuration" by rotation of the "screwdriver end" of a tool, wherein the first and second bodies are expanded to engage the adjacent bones of the patient's spine. Larsen expressly states that rotation of screw 418 in a clockwise direction causes the screw to advance within threaded bore 422 thereby advancing camming block 412 in the direction indicated by the directional arrow in FIG. 24 and displacing upper support member 402 from lower support member 404. Rotation of the second tool's shaft within the insertion instrument's "channel" rotates the "screwdriver end" engaged with screw 418, which advances camming block 412 and moves upper support member 402 and lower support member 404 from the "first compressed configuration" to the "second expanded configuration", with contacting surfaces 406 and 408 (carrying pyramid-shaped projections 410) engaging the adjacent vertebrae. See Larsen at 8:8-47; Figs. 21-24.

adjacent bones of the patient's spine.



Gordon, in turn discloses that the rotating screwdriver end is that of the second tool (driver 708), and that it is rotated by nature of the rotation of the second elongate shaft (inner shaft 724) inside the channel defined by outer shaft 706. Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38. Indeed, inner shaft 724 may be coupled with thumbwheel 714, which provides the rotation mechanism for inner shaft 724 and connected driver head 726. Gordon '026 ¶ [0233]; Fig. 35. This combination would be obvious to a person of skill in the art for the reasons described above with respect to claim limitations [14F]–[14I].



To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in

	Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
Claim 15	
[15A] The expandable spinal spacer system of claim 14, wherein the wedge comprises two angled surfaces, wherein the two angled surfaces comprise a first angled surface positioned against a first internal surface of the first body and a second angled surface positioned against a second internal surface of the second body; and	See discussion above with respect to claim 3.
[15B] wherein the first body and the second body are coupled by two pins.	See discussion above with respect to claim 5.
Claim 16	
[16] The expandable spinal spacer system of claim 14, wherein the first tool further comprises a handle positioned at the proximal end of the first elongate shaft.	Claim 16 depends from Claim 14. Larsen in combination with McLuen and Gordon '026 discloses all limitations of Claim 14 as shown above. To the extent Larsen does not expressly disclose that the “first tool” further comprises a “handle” positioned at the “proximal end” of the “first elongate shaft”, Gordon '026 discloses “handle” 712, which is a “handle” positioned at the “proximal end” of the “first elongate shaft” (outer shaft 706) of instrument 700. Gordon '026 expressly describes “handle” 712 as located at the “proximal end” of outer shaft 706 of instrument 700, providing the surgeon with a grip to manipulate the “first tool” during implant delivery. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38. A person of ordinary skill in the art would have found it obvious to use the tool system disclosed in Gordon '026 with the Larsen implant because Larsen suggests, but does not describe in great detail, a tool, and because both Gordon and Larsen are directed to expanding interbody devices via a screw mechanism. Alternately, a person of ordinary skill in the art would have found it obvious to add the elements of the Gordon tool system to the Larsen tool for multiple independent reasons including: (1) combining the known element of Larsen's elongate insertion instrument with the known element of Gordon '026's proximal “handle” 712 constitutes combining prior art elements according to known methods to yield entirely

	predictable results, namely providing a comfortable, controlled grip for the surgeon during delivery of the expandable implant; (2) Gordon '026's proximal "handle" 712 is a known technique used to improve elongate surgical insertion instruments by giving the surgeon a fixed grip point from which to manipulate the distal tip, and applying that known technique to Larsen's grasping instrument would improve it in the same way — Gordon '026 demonstrates the technique works on a structurally similar expandable spinal implant delivery instrument; (3) Larsen's insertion instrument is a known surgical tool ready for improvement, and Gordon '026's "handle" 712 provides the known improvement of a proximal grip, yielding the predictable result of improved ergonomics and control during implant delivery; and (4) a person of ordinary skill would have been motivated to look to Gordon '026 because Gordon '026 and Larsen are in the same field of expandable spinal implants and delivery instrumentation, both address the common problem of precisely delivering an expandable implant into the intervertebral space, and Gordon '026 expressly discloses that "handle" 712 is part of the same tool assembly that grips the implant and delivers a rotational driver through its central "channel" — an integrated function Larsen's implant also requires. See Larsen at 8:8–47; Figs. 21–24; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38. To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
Claim 17	
[17] The expandable spinal spacer system of claim 14, wherein the second tool is configured to be used to expand the first body and the second body of the spacer device with fluoroscopic guidance.	Claim 17 depends from Claim 14. Larsen in combination with McLuen and Gordon '026 discloses all limitations of Claim 14 as shown above, including the second tool that is configured to be used to expand the first body and the second body of the spacer device. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38. Davis discloses the use of fluoroscopic guidance during implantation and expansion of expandable intervertebral implants, permitting the surgeon to monitor the position of the implant and the progress of expansion in real time. Davis ¶ [0015]. A person of ordinary skill in the art at the priority date of the '088 Patent (October 25, 2012) would have found it obvious to expand Larsen's implant under fluoroscopic guidance as taught by Davis for multiple independent reasons, each of which is sufficient standing alone, including: (1) combining a known technique (fluoroscopic monitoring of implant position) with a known device (Larsen's expandable spacer) to yield predictable results — fluoroscopy was a well-established intraoperative imaging modality for spinal surgery at the priority date; (2) applying Davis's express teaching that fluoroscopic guidance is used during

	implantation of expandable intervertebral implants (Davis ¶ [0015]); (3) using a known technique to solve a known problem in a predictable way — real-time visualization of the expanding implant reduces the risk of malposition, over-distraction, and vertebral endplate injury; and (4) obvious to try — at the priority date there was a small, well-defined set of intraoperative imaging modalities available for spinal-implant procedures, and fluoroscopy was the standard choice among them. See Larsen at 8:8–47; Figs. 21–24. To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026 and/or Davis, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 and/or Davis or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
Claim 18	
[18A] A method of operating the expandable spinal spacer system of claim 16, the method comprising: inserting the spacer device in a target surgical location between two adjacent bones of a spine of a human patient;	Claim 18 depends from Claim 16. Larsen in combination with McLuen and Gordon '026 discloses all limitations of Claim 16 as shown above. Larsen discloses a method of operating the “expandable spinal spacer system” including inserting the “spacer device” in a target surgical location between two “adjacent bones” of a spine of a human patient. Larsen expressly describes implant 400 as an implant for insertion within an intervertebral space defined between adjacent vertebrae ‘V1, V2’ for supporting the vertebrae in predetermined spaced relation during healing, and discloses that the implant is inserted in a compact (closed) configuration into the intervertebral space between the adjacent vertebrae. See Larsen at Title, Abstract, 8:8–47; Figs. 21–24. To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
[18B] turning, with the screwdriver end of the second tool, the threaded screw portion of the wedge to actuate a movement of the wedge between the first body and the second body so as to pivot the first body away from the	As discussed above in claim limitation [14J], Gordon discloses turning the screwdriver end of a second tool. As disclosed above in claim limitation [1D], Larsen discloses that the turning of that screwdriver actuates a movement of the wedge between a first body and a second body so as to pivot the first body away from the second body while the spacer device is positioned between the two adjacent bones of the spine of the human patient. Larsen expressly states that rotation of screw 418 in a clockwise direction causes the screw to advance within threaded bore 422 thereby advancing camming block 412 in the direction indicated by the directional arrow in FIG. 24 and displacing upper support member 402 from lower support member 404. The

second body while the spacer device is positioned between the two adjacent bones of the spine of the human patient; and	“screwdriver end” of the rotational driver (“second tool”) turns screw 418 to advance camming block 412, pivoting upper support member 402 away from lower support member 404 about pins 432 while implant 400 is positioned between vertebrae V1, V2. See Larsen at Title, Abstract, 8:8–47; Figs. 21–24. To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon ’026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon ’026 or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon ’026 ¶¶ [0226]–[0238]; Figs. 35–38.
[18C] when the first bone-interfacing surface of the first body and the second bone-interfacing surface of the second body are positioned so as to engage with the two adjacent bones of the spine of the human patient, removing the second tool from the channel defined by the first tool.	Larsen and/or Gordon discloses that when the “first bone-interfacing surface” of the “first body” and the “second bone-interfacing surface” of the “second body” are positioned so as to engage with the two “adjacent bones” of the spine of the human patient, the “second tool” is removed from the “channel” defined by the “first tool”. Once camming block 412 has been advanced to place implant 400 in its “expanded configuration” — in which contacting surfaces 406 and 408 (carrying pyramid-shaped projections 410) engage vertebrae V1 and V2 — the rotational driver (“second tool”) is withdrawn proximally from the “channel” of the insertion instrument (“first tool”). This removal step is an ordinary and expected part of completing an expandable implant placement as disclosed by Larsen. See Larsen at 8:8–47; Figs. 21–24; Gordon ’026 ¶¶ [0226]–[0238]; Figs. 35–38. Alternatively, a POSITA would have found it obvious to combine the art discussed herein with the teaching of the Medtronic system art relative to this limitation. The Medtronic System Art contains substantially the same indentations as McLuen. The Medtronic System Art also reflects an inserter that is substantially similar to that of Gordon but contains prongs that are suited for the indentations taught in the Medtronic System Art. The Medtronic System Art further discloses this limitation, and renders it obvious in combination with the art discussed herein. Similarly, U.S. Patent No. 7,118,579 to Michelson at 17:35-44 expressly discloses that “after implant 100 is positioned in an expanded stated, expander driver is removed from implant driver 500.” Given the similarities between the system disclosed in Alheidt and that disclosed in this Michelson reference, it would have been obvious to add this step as disclosed in Michelson to the removal process described in Alheidt. To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon ’026, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon ’026 or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon ’026 ¶¶ [0226]–[0238]; Figs. 35–38.

Claim 19	
[19] The method of claim 18, further comprising: while turning, with the screwdriver end of the second tool, the threaded screw portion of the wedge to actuate a movement of the wedge to pivot the first body away from the second body, monitoring a position of the first bone-interfacing surface of the first body and a position of the second bone-interfacing surface of the second body relative to a first bone of the spine of the human patient and a second bone of the spine of the human patient, respectively.	Claim 19 depends from Claim 18. Larsen in combination with McLuen and Gordon '026 discloses all limitations of Claim 18 as shown above, including the method step of, while turning, with the screwdriver end of the second tool, the threaded screw portion of the wedge to actuate a movement of the wedge to pivot the first body away from the second body, the first bone-interfacing surface of the first body and the second bone-interfacing surface of the second body are engaged with the adjacent vertebrae during expansion. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38. Davis discloses the use of fluoroscopic guidance to monitor the position of expandable intervertebral implants, including monitoring the position of the implant's bone-contacting surfaces relative to the adjacent vertebrae during and after expansion. Davis ¶ [0015]. A person of ordinary skill in the art at the priority date of the '088 Patent (October 25, 2012) would have found it obvious to monitor the position of the first bone-interfacing surface and the position of the second bone-interfacing surface relative to the adjacent vertebrae during the expansion step of Larsen's implant under fluoroscopic guidance as taught by Davis for multiple independent reasons, each of which is sufficient standing alone, including: (1) combining a known technique (fluoroscopic monitoring of implant position relative to bony anatomy) with a known device (Larsen's expandable spacer) to yield predictable results; (2) applying Davis's express teaching that fluoroscopic guidance permits real-time monitoring of expandable spinal implants during implantation and expansion (Davis ¶ [0015]); (3) using a known technique to solve a known problem in a predictable way — real-time visualization of the implant's bone-contacting surfaces relative to the adjacent vertebrae reduces the risk of malposition, over-distraction, and vertebral endplate injury; and (4) obvious to try — fluoroscopy was the standard intraoperative imaging modality for monitoring expandable spinal implants at the priority date. See Larsen at 8:8–47; Figs. 21–24. To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Larsen and/or McLuen and/or Gordon '026 and/or Davis, it would have been obvious to a person having ordinary skill in the art to modify Larsen and/or McLuen and/or Gordon '026 and/or Davis or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation. See Larsen at 8:8–47; Figs. 21–24; McLuen ¶¶ [0075]–[0078]; Figs. 15–17; Gordon '026 ¶¶ [0226]–[0238]; Figs. 35–38.
Claim 20	
[20] The method of claim 19, wherein the first and second bone-	See discussion above with respect to claim 10.

interfacing surfaces each comprises at least one feature configured to engage the first bone of the spine of the human patient and the second bone of the human patient when the first body and the second body are in the second expanded configuration.	
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