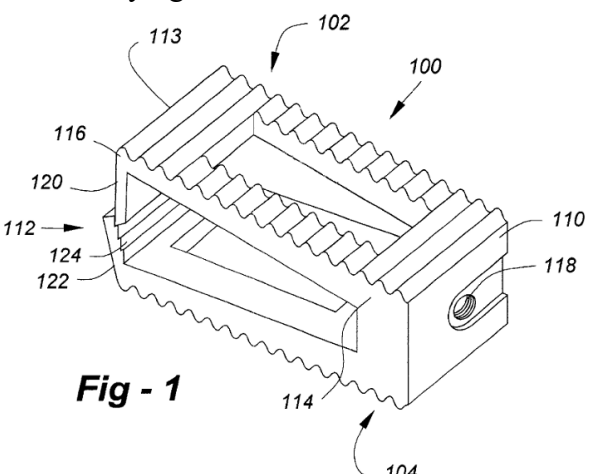
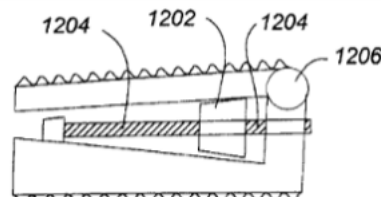
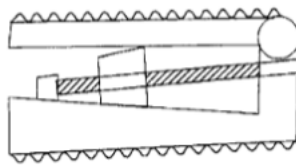


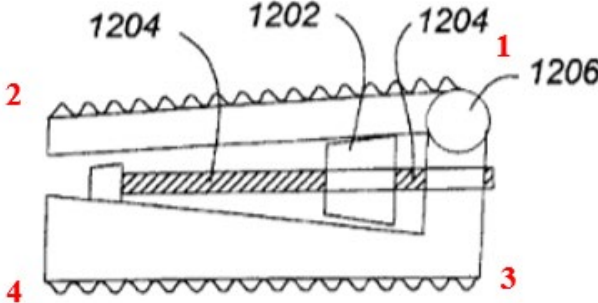
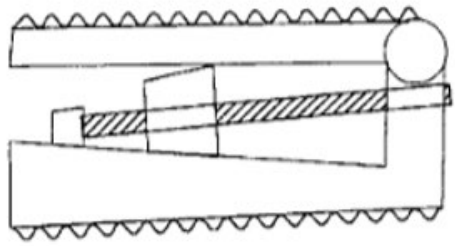
Exhibit F3 – Invalidity of U.S. Patent No. 10,426,633 in view of Ferree and Michelson

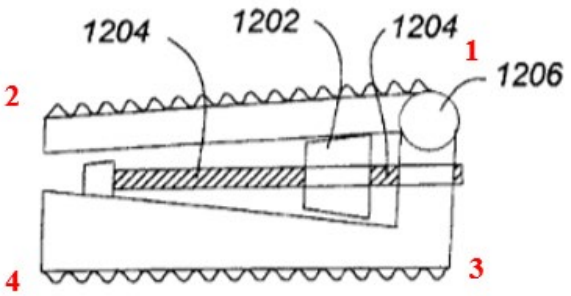
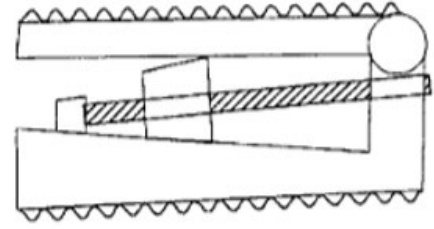
U.S. Patent No. 6,491,724 to Ferree (“Ferree”), alone or in combination with U.S. Patent No. 7,118,579 to Michelson (“Michelson”), and/or in combination with other prior art identified in the cover pleading and/or discussed below, anticipates or renders obvious the asserted claims of U.S. Patent No. 10,426,633 (the “’633 Patent”). This chart applies an October 25, 2012 priority date for the ’633 Patent. Ferree issued on December 10, 2002, 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). Michelson issued on October 10, 2006, 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). Palmatier was filed on December 19, 2011, and is prior art to the ’633 Patent under at least 35 U.S.C. § 102(e). This chart also relies on U.S. Patent No. 9,445,919 to Palmatier (“Palmatier”) and/or U.S. Patent Publication No. 2006/0253201 (“McLuen”) for certain tool-related disclosures. Palmatier was filed on December 19, 2011, and is prior art to the ’633 Patent under at least 35 U.S.C. § 102(e). 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). 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.

Claims	Exemplary Citations to Prior Art
Claim 1	
[1A] An expandable intervertebral fusion device comprising: a first movable portion extending from a first end to a second end, wherein the first movable portion has first and second end portions positioned at the first and second ends, respectively, and has first and second side portions extending between the first and second end portions,	To the extent the preamble is limiting, Ferree discloses an “expandable intervertebral fusion device” . Ferree at Title; Abstract; 7:52-8:12; Figs. 1, 11A, 11B, 12A, 12B. Ferree further discloses “a first movable portion extending from a first end to a second end, wherein the first movable portion has first and second end portions positioned at the first and second ends, respectively, and has first and second side portions extending between the first and second end portions.” This is shown below, with the respective end portions of the hingedly connected (and thus movable) upper and lower bodies labeled in red numerals. The side portions extend between the end portions. (Ferree also discloses sidewalls in these locations, <i>see</i> Ferree at Figs. 6A, 6B, 5:64-6:4.) For this chart, it is the upper body of Ferree that is the “first movable portion.”

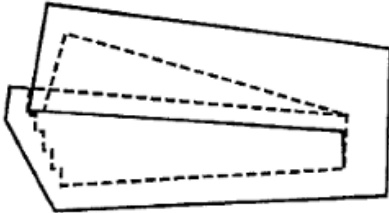
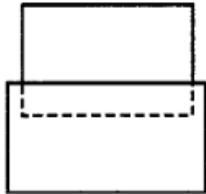
Claims	Exemplary Citations to Prior Art
	<div data-bbox="594 142 1134 418"> <p>Fig - 12A</p> </div> <div data-bbox="1249 186 1648 397"> <p>Fig - 12B</p> </div> <div data-bbox="598 560 1165 1015"> <p>Fig - 1</p> </div> <p>Ferree at Figs. 1, 11A, 11B, 12A, 12B; <i>see also id.</i> at 7:52-8:12.</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
<p>[1B] wherein the first movable portion has a first vertebral body engagement surface and has a first interior surface positioned on an</p>	<p>Ferree discloses this limitation. As shown, the upper body has a vertebral body engagement surface with a plurality of ridges for interfacing with a vertebral body. Ferree at Figs. 1, 11A, 11B, 12A, 12B. Ferree teaches with respect to Figure 1 that upper and lower surfaces 102 and 104 “preferably include grooves 113, as shown, or alternative surfacing to better engage with the endplates of the adjacent vertebrae for long-term</p>

Claims	Exemplary Citations to Prior Art
<p>opposite side of the first movable portion than the first vertebral body engagement surface;</p>	<p>stability.” Ferree at 5:28-31 (this teaching, and other teachings herein with respect to Figure 1, are equally applicable to the embodiments depicted in Figures 11 and 12, which add hinge and opening mechanisms to the underlying structure disclosed and described as to Figure 1, <i>see</i> Ferree at 4:47-55).</p>  <p>Fig - 1</p> <p>As pictured, the Ferree implant also has a first interior surface positioned on the opposite side of the upper body from the bone-facing surface. Ferree at Figs. 12A, 12B.</p>  <p>Fig - 12A</p>  <p>Fig - 12B</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>

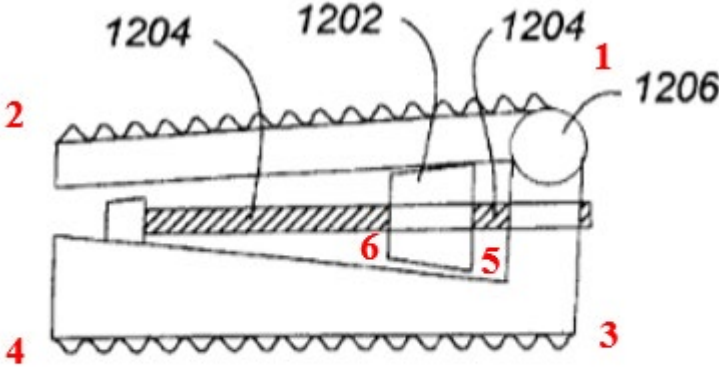
Claims	Exemplary Citations to Prior Art
<p>[1C] a second movable portion extending from a third end to a fourth end, wherein the second movable portion has third and fourth end portions positioned at the third and fourth ends, respectively, and has third and fourth side portions extending between the third and fourth end portions,</p>	<p>Ferree discloses this limitation, as pictured below. In this chart, the lower member is the “second body”, and the third and fourth end portions are as numbered. The side portions extend therebetween. (Ferree also discloses sidewalls in these locations, <i>see</i> Ferree at Figs. 6A, 6B, 5:64-6:4.)</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <p>Fig - 12A</p> <p>Fig - 12B</p> </div> <p>Ferree at Figs. 1, 11A, 11B, 12A, 12B; <i>id.</i> at 7:52-8:12. The upper and lower members are hingedly connected, and thus movable. <i>Id.</i> at 11:52-8:12.</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
<p>[1D] wherein the second movable portion has a second vertebral body engagement surface and has a second interior surface positioned on an opposite side of the second movable portion than the second vertebral body engagement surface,</p>	<p>Ferree discloses a “second vertebral body engagement surface” on the “second movable portion” (the lower member of Figs. 12A–12B), with a “second interior surface” on the opposite side. The lower member’s outwardly-facing surface engages the adjacent vertebra below — “[t]he superior and inferior surfaces preferably include protrusions for frictionally engaging with vertebral endplates defining the disk space.” Ferree at 3:35–37. The opposite (inwardly-facing) surface faces slug 1202 within the cage interior and is the “second interior surface”. See Ferree at 7:66–8:12; Figs. 1, 12A, 12B.</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>

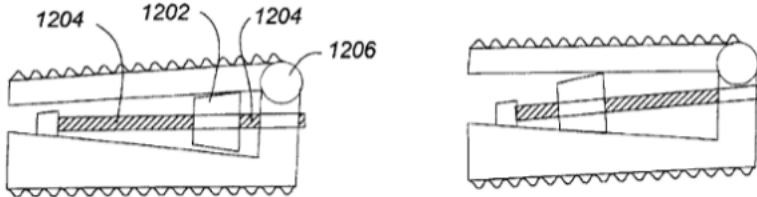
Claims	Exemplary Citations to Prior Art
<p>[1E] wherein the first movable portion is aligned with the second movable portion such that the first end of the first movable portion is axially aligned with the third end of the second movable portion and the second end of the first movable portion is axially aligned with the fourth end of the second movable portion,</p>	<p>Ferree discloses this limitation, as shown below.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <p>Fig - 12A</p> <p>Fig - 12B</p> </div> <p>Ferree at Figs. 1, 6A, 6B, 8B, 11A, 11B, 12A, 12B; <i>id.</i> at 7:66-8:12.</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
<p>[1F] wherein the first end portion of the first movable portion is hingedly connected to the third end portion of the second movable portion such that the first movable portion can pivot with respect to the second movable portion so as to move the second end portion of the first movable portion away from the fourth end portion of the second movable portion,</p>	<p>Ferree discloses this claim limitation, as shown. <i>See</i> Ferree at 7:52-52-54 (“As opposed to the entire use of shape-memory material, hinges may be used instead of, or in conjunction with shape-memory elements.”); <i>id.</i> at 8:6-12 (“By turning the threaded rod 1204, the slug 1202 is moved to posterior to anterior, with the surfaces of the slug bearing against the lower and upper members, causing the upper member to hinge at point 1206, and move upwardly, as shown in FIG. 12B, to assume a desired wedge-shaped orientation following introduction into the intervertebral disc space.”); <i>see also id.</i> at 7:52-8:12; Figs. 11A, 11B, 12A, 12B.</p>

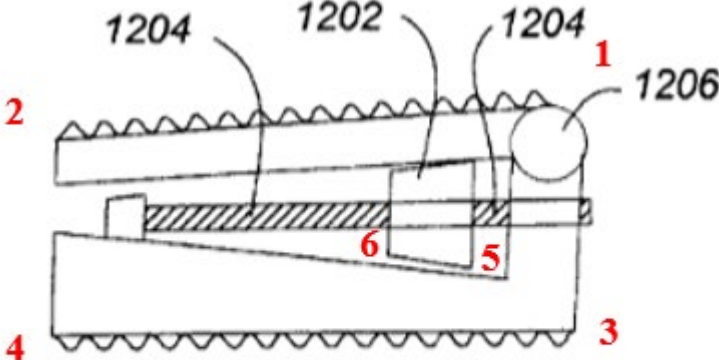
Claims	Exemplary Citations to Prior Art
	<div data-bbox="594 142 1182 440"> </div> <div data-bbox="751 505 978 561"> <p>Fig - 12A</p> </div> <div data-bbox="1299 185 1734 418"> </div> <div data-bbox="1430 505 1652 561"> <p>Fig - 12B</p> </div> <p data-bbox="583 591 1974 732">To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation.</p>
<p>[1G] wherein the second movable portion defines a slot in the fourth end portion between the third and fourth side portions that is sized to receive the second end portion of the first movable portion such that the second end of the first movable portion and the fourth end of the second movable portion are axially aligned; and</p>	<p>Ferree discloses, or in the alternative renders obvious, that the “second movable portion” defines a “slot” in the “fourth end portion” between the “third and fourth side portions” sized to receive the “second end portion” of the “first movable portion”. Ferree describes a configuration in which the cage is “constructed such that a portion of the top or bottom half sleeves over the other half, thereby closing the side openings when the two halves are put together. Such an arrangement is shown in FIGS. 6A and 6B.” Ferree at 5:66–6:2; Figs. 6A, 6B. The outer half receiving the inner half forms a “slot” — the receiving channel/sleeve — into which the other half’s end portion is received in the same axial alignment recited in claim 1. <i>See</i> Ferree at 5:64–6:4; Figs. 6A, 6B.</p>

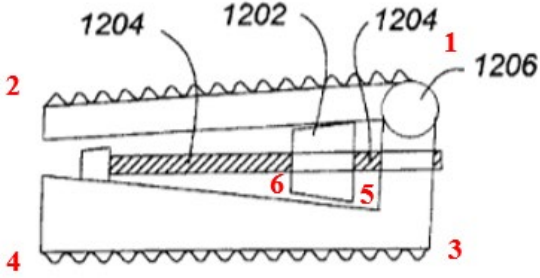
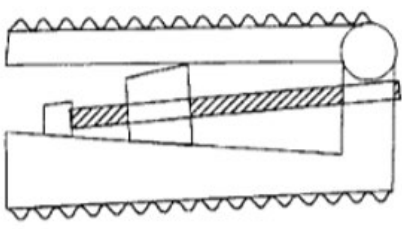
Claims	Exemplary Citations to Prior Art
	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Fig - 6A</p> </div> <div style="text-align: center;">  <p>Fig - 6B</p> </div> </div> <p>This disclosure of Ferree is equally applicable to all embodiments of Ferree, including the Figure 12A-12B embodiment, and a person of skill in the art would have found it obvious to include this teaching in the Figure 12A-12B embodiment, particularly given the motivation to do so described in Ferry, which included better encapsulating bone graft material. <i>See</i> Ferree at 5:52-6:4.</p> <p>Alternatively, to the extent the “slot” teaching of Figs. 6A/6B is argued not to be expressly part of the Fig. 12A/12B embodiment, it would have been obvious within Ferree to combine the Fig. 6A/6B sleeving arrangement with the Fig. 12A/12B embodiment for multiple independent reasons including: (1) combining the known Fig. 12 expansion mechanism with the known Fig. 6A/6B sleeving combines prior art elements according to known methods to yield predictable results — a sleeved cage that nests the upper member’s anterior end within the lower member’s anterior end while still permitting the Fig. 12 expansion via slug 1202 and threaded rod 1204; (2) Ferree’s sleeving teaching is a known technique used to improve cage stability by closing the side openings (and thereby better restraining bone graft material) and constraining lateral movement between the two halves, and applying that known technique to the Fig. 12 embodiment improves it in the same way; (3) the Fig. 12 cage is a known expandable cage ready for improvement, and the Fig. 6A/6B sleeving provides the known improvement of structural nesting, <i>see</i> Ferree at 5:64–6:4; Figs. 6A, 6B; and (4) using the teachings from one of Ferree’s embodiments to modify another of its embodiments would have been obvious to a POSITA if not expressly or implicitly suggested by Ferree itself.</p>

Claims	Exemplary Citations to Prior Art
	<div data-bbox="594 315 968 509"> </div> <div data-bbox="674 558 831 597">Fig - 12A</div> <div data-bbox="1052 347 1346 509"> </div> <div data-bbox="1140 558 1289 597">Fig - 12B</div> <div data-bbox="1352 133 1944 607"> </div> <div data-bbox="1430 493 1535 532">Fig - 1</div> <p data-bbox="583 630 1974 769">To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation.</p>
<p data-bbox="109 789 525 1075">[1H] a mechanism that pivotably moves the first movable portion and the second movable portion with respect to each other to expand a dimension of the expandable intervertebral fusion device, wherein the mechanism comprises:</p>	<p data-bbox="583 789 1974 1075">Ferree discloses a mechanism that pivotably moves the “first movable portion” and the “second movable portion” with respect to each other to expand a dimension of the “expandable intervertebral fusion device”. Ferree expressly states that turning threaded rod 1204 advances slug 1202 from posterior to anterior with the slug surfaces bearing against the lower and upper members, causing the upper member to hinge at point 1206 and move upwardly with respect to the lower member. The combined slug-and-threaded-rod assembly is the mechanism that pivotably moves the upper and lower members; it thus expands a dimension of the cage (the height) by separating the upper member from the lower member. <i>See</i> Ferree at 7:52–8:12; Figs. 12A, 12B.</p> <div data-bbox="594 1094 968 1289"> </div> <div data-bbox="674 1338 831 1377">Fig - 12A</div> <div data-bbox="1052 1127 1346 1289"> </div> <div data-bbox="1140 1338 1289 1377">Fig - 12B</div>

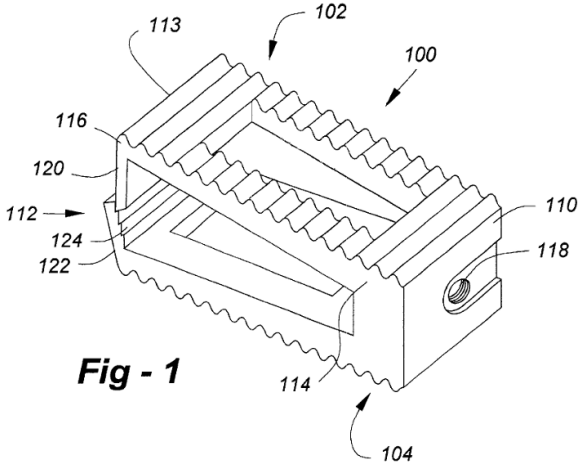
Claims	Exemplary Citations to Prior Art
	<p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
<p>[1I] a wedge extending from a fifth end to a sixth end and having an angled wedge surface extending along at least a portion of a distance between the fifth end and the sixth end,</p>	<p>Ferree discloses a “wedge” extending from a “fifth end” to a “sixth end” and having an “angled wedge surface” extending along at least a portion of a distance between the “fifth end” and the “sixth end”, as shown below. Ferree’s slug 1202 is the “wedge”: it extends along the cage’s “longitudinal axis” from a posterior end (the “fifth end”) to an anterior end (the “sixth end”). As slug 1202 advances anterior, “the surfaces of the slug bearing against the lower and upper members” cause the upper member to hinge upward with respect to the lower member, which structurally requires slug 1202 to present an “angled wedge surface” that converts axial motion into vertical separation. See Ferree at 7:66–8:12; Figs. 12A, 12B.</p>  <p style="text-align: center;">Fig - 12A</p> <p>Ferree at 12A (annotated).</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
<p>[1J] wherein the wedge is positioned between the first</p>	<p>Ferree discloses this claim limitation, as shown below. Both the top and bottom of the wedge are angled surfaces. As a reminder, the first movable portion, according to this chart, is the upper body.</p>

Claims	Exemplary Citations to Prior Art
<p>movable portion and the second movable portion with the angled wedge surface facing the first interior surface of the first movable portion,</p>	<div data-bbox="594 142 1346 423">  <p>Fig - 12A Fig - 12B</p> </div> <p>Ferree at Figs. 12A, 12B; <i>see also id.</i> at 7:66–8:12.</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
<p>[1K] wherein the first interior surface of the first movable portion has an angled movable portion surface shaped to engage the angled wedge surface of the wedge, wherein a distance from the fifth end to the sixth end of the wedge is less than a distance from the first end to the second end of the first movable portion and is less than a distance from the third end to the fourth end of the second movable portion,</p>	<p>Ferree discloses this claim limitation, as shown below. <i>See also</i> Ferree at 8:6-12 (“By turning the threaded rod 1204, the slug 1202 is moved to posterior to anterior, with the surfaces of the slug bearing against the lower and upper members, causing the upper member to hinge at point 1206, and move upwardly, as shown in FIG. 12B, to assume a desired wedge-shaped orientation following introduction into the intervertebral disc space.”).</p>

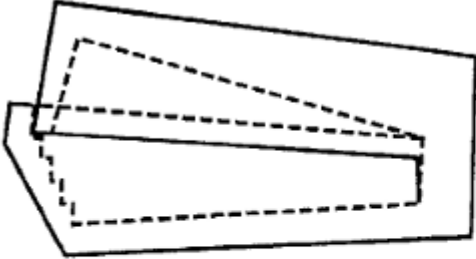
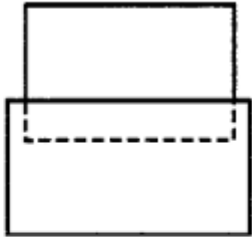
Claims	Exemplary Citations to Prior Art
	 <p style="text-align: center;">Fig - 12A</p> <p>Ferree at Fig. 12A (annotated).</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation.</p>
<p>[1L] wherein the wedge is configured to slide within a space defined between the first and second movable portions in a direction toward the second and fourth ends of the first and second movable portions from a first wedge position that allows the first and second movable portions to pivot to a device position that is substantially closed to a second wedge position whereby the angled wedge surface presses against the first interior surface of</p>	<p>Ferree also discloses this limitation, as shown below. <i>See</i> Ferree at Figs. 1, 12A-12B; <i>id.</i> at 7:66-8:12 (“In FIG. 12A, the cage is shown in a collapsed state with a slug 1202 on a threaded rod 1204 being set back from the anterior region, allowing the height of the device to be compressed from front to back, as shown. By turning the threaded rod 1204, the slug 1202 is moved to posterior to anterior, with the surfaces of the slug bearing against the lower and upper members, causing the upper member to hinge at point 1206, and move upwardly, as shown in FIG. 12B, to assume a desired wedge-shaped orientation following introduction into the intervertebral disc space.”). As shown below, during this operation, the wedge remains attached along the axis of the screw, and thus “remains axially confined within the space defined by the first body and the second body in the compressed and expanded configurations.”</p>

Claims	Exemplary Citations to Prior Art
<p>the first movable portion to hingedly open the first movable portion with respect to the second movable portion whereby the wedge remains axially confined within the space defined by the first and second movable portions in the first and second wedge positions; and</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>First Wedge Position</p>  <p>Fig - 12A</p> </div> <div style="text-align: center;"> <p>Second Wedge Position</p>  <p>Fig - 12B</p> </div> </div> <p>Ferree at Figs. 12A, 12B (annotated).</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
<p>[1M] a rotation screw operably connected to the wedge and to the second movable portion, wherein rotation of the rotation screw moves the wedge in an axially translating direction with respect to the first movable portion and the second movable portion within the space defined between the first and second movable portions from the first wedge position to the second wedge position.</p>	<p>Ferree discloses a “rotation screw” operably connected to the “wedge” and to the “second movable portion”, wherein rotation of the “rotation screw” moves the “wedge” in an axially translating direction with respect to the “first movable portion” and the “second movable portion” “within the space defined between the first and second movable positions from the first wedge position to the second wedge position”.</p>

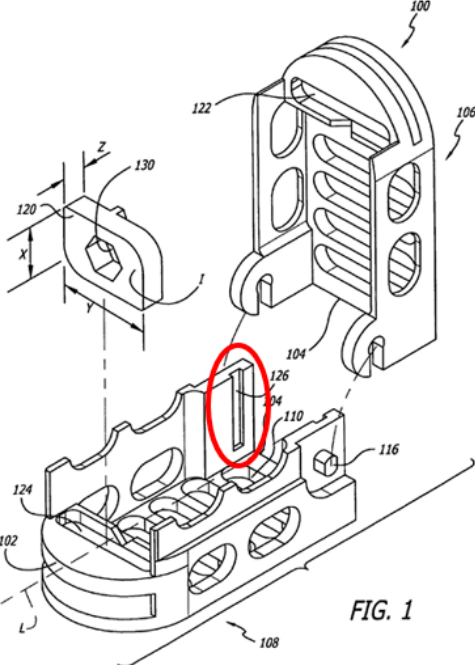
Claims	Exemplary Citations to Prior Art
	<div data-bbox="583 168 1146 467" data-label="Image"> </div> <div data-bbox="709 542 936 597" data-label="Caption"> <p>Fig - 12A</p> </div> <div data-bbox="1276 217 1726 457" data-label="Image"> </div> <div data-bbox="1411 542 1629 597" data-label="Caption"> <p>Fig - 12B</p> </div> <p data-bbox="583 639 1990 1075">Threaded rod 1204 is the “rotation screw”, and slug 1202 (the “wedge”) is operably connected thereto because it is threadably mounted on it. Ferree at 8:2-12. Figures 12A and 12B (with reference to similar structures disclosed in Figures 1, 2, 3, 9A, 9B, and 8D) further show that threaded rod is mounted through a hole in the lower body and again at the other end, holding it steady for turning movement, and thus “operably connected” to that body. “Rotation of the rotation screw moves the wedge in an axially translating direction with respect to the first movable portion and the second movable portion within the space defined between the first and second movable portions from the first wedge position to the second wedge position.” See Ferree at Figs. 12A, 12B; see also <i>id.</i> at 7:66-8:12 (“By turning the threaded rod 1204, the slug 1202 is moved to posterior to anterior, with the surfaces of the slug bearing against the lower and upper members, causing the upper member to hinge at point 1206, and move upwardly, as shown in FIG. 12B.”); see also <i>id.</i> at 3:38-44 (The “externally accessible mechanism” “may include a slug positioned on a threaded rod which moves posterior to anterior when the rod is rotated.”).</p> <p data-bbox="583 1088 1990 1230">To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
Claim 2	
[2] The device of claim 1, wherein the first movable portion defines a	Claim 2 depends from Claim 1. Ferree discloses or renders obvious all limitations of Claim 1 as shown above.

Claims	Exemplary Citations to Prior Art
<p>first bone material receiving area between the first and second end portions and the first and second side portions, wherein the second movable portion defines a second bone material receiving area between the third and fourth end portions and the third and fourth side portions, and wherein the first bone material receiving area is aligned with the second bone material receiving area and sized such that a path between the first and second bone material receiving areas is only partially blocked by the wedge.</p>	<p>Ferree further discloses and/or renders obvious this limitation under two potential interpretations. First, it depicts holes in the top and bottom members, extending from the internal surfaces to the external, bone-engaging surfaces. These holes are between the ends and sides of each member, respectively, and can be considered bone material receiving areas.</p>  <p>Fig - 1</p> <p>Ferree at Fig. 1. A person of skill in the art would understand that this structure of the device, depicted in Figure 1, is equally applicable to the device in Figures 12A and 12B, even though that device is never shown at an angle. It is clear from Figure 1 that the hole in the upper member and the hole in the lower member are aligned. Then, putting together the angled view of Figure 1 with the side view of Figures 12A and 12B, it is clear that the holes in the upper and lower members are longer than the length of the web, thus satisfying that “a path between the first and second bone material receiving areas is only partially blocked by the wedge.”</p>

Claims	Exemplary Citations to Prior Art
	<div data-bbox="615 147 1178 446" data-label="Image"> </div> <div data-bbox="735 521 972 578" data-label="Caption"> <p>Fig - 12A</p> </div> <div data-bbox="1299 196 1745 435" data-label="Image"> </div> <div data-bbox="1430 521 1663 578" data-label="Caption"> <p>Fig - 12B</p> </div> <p data-bbox="583 618 1992 976">Alternately, this limitation is satisfied in the combination proposed above in which the hinged Ferree embodiment is given the sidewalls described elsewhere in Ferree to better encapsulate bone graft material. <i>See</i> Ferree at Figs. 6A, 6B; <i>id.</i> at 5:52-6:4. In that combination, the bone material receiving area would extend further into the body of the device. Regardless of the specific Ferree configuration, Ferree makes very clear that the purpose of the interior area of its device is to retain bone graft material. <i>See</i> Ferree at 2:15-26; 3:8-13 (“This invention improves upon the existing art by providing intervertebral cages, and methods of introducing the same, which require few, if any, structural components within the cage itself, thereby providing a maximum volume for bone-graft filler materials.”); 5:52-6:4. As described above, that is part of why a person of skill in the art would have been motivated to add sidewalls to the embodiment of Figs. 12A-12B.</p>

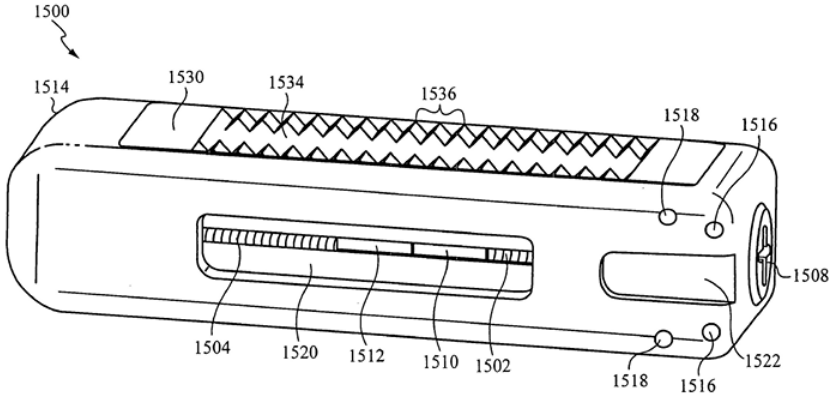
Claims	Exemplary Citations to Prior Art
	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Fig - 6A</p> </div> <div style="text-align: center;">  <p>Fig - 6B</p> </div> </div> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation.</p>
Claim 4	
<p>[4] The device of claim 1, and further comprising means for mating the second movable portion with prongs of a tool.</p>	<p>Claim 4 depends from Claim 1. Ferree discloses or renders obvious all limitations of Claim 1 as shown above.</p> <p>Ferree discloses means for mating the second movable portion with at least one prong of a tool. According to Ferree, “FIG. 8D is a drawing which shows one way in which an elongated member may be used to hold a cage according to the invention in a collapsed state during introduction of the device into an intervertebral space.” Ferree at 4:21-24; <i>see also id.</i> at 6:54-7:9. Ferree further states that this instrumentation is directly applicable to the embodiment depicted in Figures 12A and 12B. <i>Id.</i></p>

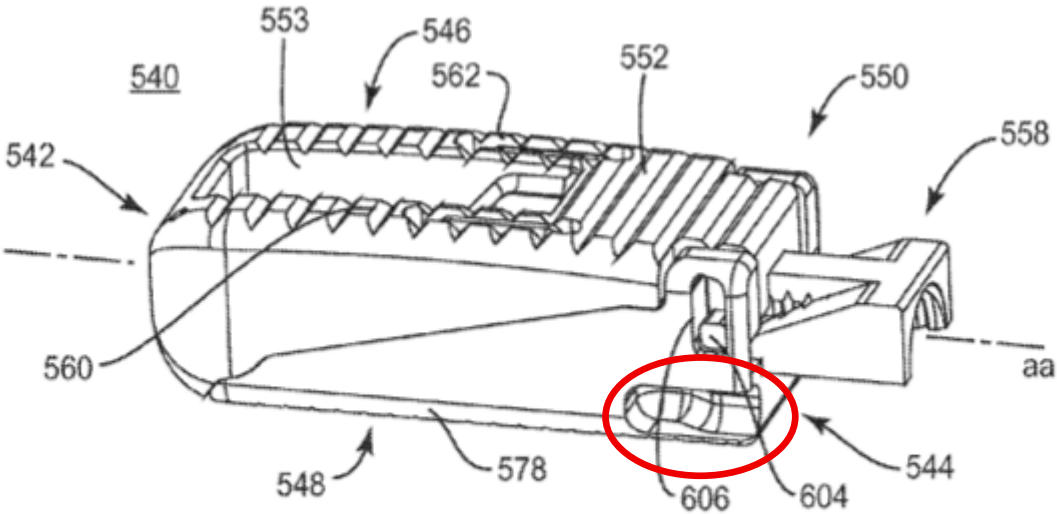
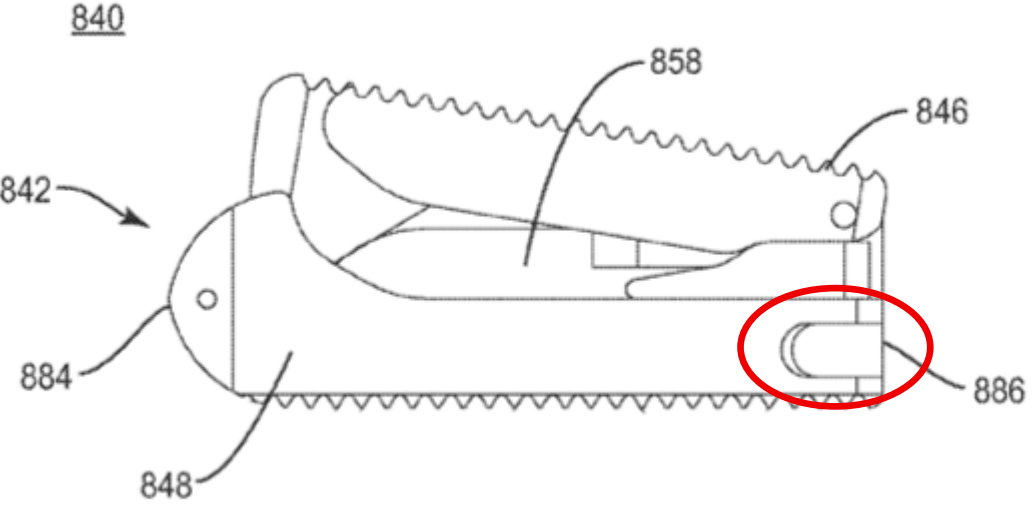
Claims	Exemplary Citations to Prior Art
	<div data-bbox="596 152 1415 513" data-label="Image"> <p>Fig - 8D</p> </div> <p>According to Ferree, elongated member 880 has “a distal end attached to the posterior portion of the cage as through the threaded hold 118 shown in FIG. 1.” Ferree at 6:54-60; <i>see also id.</i> at 5:36-37. Second elongated member 833, in turn, “attaches one of the interlocking forward members at 884.” <i>Id.</i> at 6:54-7:9. The surgeon uses both elongated members—coupled through plate 882—to install the device. Ferree thus discloses means for mating with two prongs of an insertion tool. A person of skill in the art applying this teaching to the Figs. 12A-12B embodiment (as Ferree recommends) would understand from the relative images that at least one of the threaded holes for mating with tool prongs would be in the lower body, which is the “second movable portion,” and that it would be obvious to place the second means there as well, depending on the desired interaction between the top and bottom member. <i>See</i> Ferree at 7:66–8:12; Figs. 8D, 12A, 12B.</p> <p>To the extent Ferree is argued not to disclose means for mating the second movable portion with prongs of a tool, Michelson discloses indentations on an expandable interbody spinal fusion implant that cooperatively engage prongs of a holder instrument. Michelson describes “[a] slot 126 on implant 100 is adapted to cooperatively engage and may lockably attach to an implant holder 500 (described below).”</p>

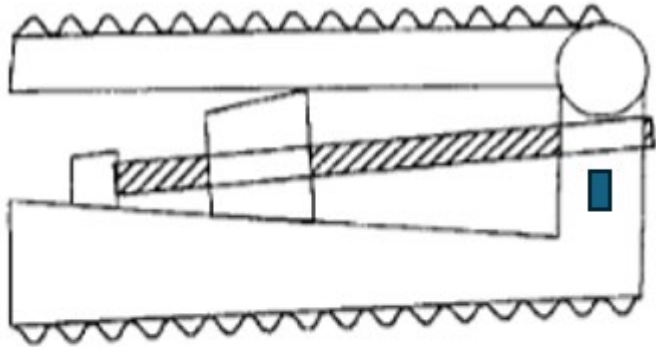
Claims	Exemplary Citations to Prior Art
	 <p>FIG. 1</p> <p>Michelson at Fig. 1 (annotated). Michelson further discloses implant holder 500 with shaft 502 and outer sleeve 504, where the outer sleeve's distal end 522 carries upper and lower extensions 526, 528, and side extensions 530 “adapted to cooperatively engage trailing end 104 of implant 100,” (Michelson at 13:9–10) and where “[s]ide extensions 530 each have a flange 532 to cooperatively engage slot 126 of implant 100 and a stop 534 for limiting further advancement of implant holder 500 into trailing end 104 of implant 100.” Michelson at 13:10–13.</p> <p>Michelson’s alternative implant 1100 also satisfies this limitation. It has “pin receiving holes 1126” (Michelson at 24:12–13) engaged by “pins 1210 of implant holder 1200.” Michelson at 24:12. The slots 126 and pin receiving holes 1126 are indentations that cooperatively mate with “prongs” (flanges 532 / pins 1210) of the holder instrument. <i>See</i> Michelson at 12:38–15:53, 16:42–67, 17:35–18:22, 23:59–24:8; Figs. 15–24, 28–30, 35–37, 55–57.</p>

Claims	Exemplary Citations to Prior Art
	<div data-bbox="604 159 1344 597" data-label="Image"> </div> <p data-bbox="583 651 1961 721">Palmatier also discloses means for mating an expandable intervertebral implant with the prongs of a device, as discussed in detail in the '633 chart directed to that reference, incorporated by reference herein.</p> <p data-bbox="583 735 1969 915">McLuen also discloses means for mating an intervertebral implant with the prongs of a device, shown below as indentation 1522. McLuen at Fig. 16; <i>see also id.</i> at [0076] (“When performing surgery near someone's spine, it is preferable to prevent or at least minimize the slipping ability. To do so, channels 1522 are implemented to receive a tool (not shown). The tool (not shown) has attachments that fit within the channels 1522 to secure the tool (not shown) in place.”).</p> <div data-bbox="604 930 1428 1328" data-label="Image"> </div> <p data-bbox="989 1328 1083 1360">Fig. 16</p>

Claims	Exemplary Citations to Prior Art
	<p>A person of ordinary skill in the art would have found it obvious to modify Ferree’s expandable cage to incorporate Michelson, Palmatier, and/or McLuen-style “tool”-receiving indentations on the sides or back of the “second movable portion” for multiple independent reasons including: (1) combining Ferree’s expandable cage with known “tool”-engagement indentations is a combination of prior art elements according to known methods that yields predictable results — secure non-slip engagement between the implant and the “insertion tool”; (2) Michelson’s, Palmatier’s, and McLuen’s “tool”-receiving indentations are a known technique used to improve insertion of expandable spinal implants by ensuring positive engagement with the holder, and applying that technique to Ferree’s implant would improve it in the same way; (3) Ferree’s cage is a known expandable spinal implant ready for improvement, and Michelson, Palmatier, and McLuen provide the known improvement of dedicated “tool”-engagement indentations, yielding the predictable result of controlled implant delivery; and (4) Michelson, Palmatier and Ferree are in the same field of expandable interbody spinal fusion implants, McLuen is in the field of interbody spinal fusion implants, and all address the common problem of inserting and expanding such implants in vivo, and Michelson, Palmatier, and McLuen expressly teach that their indentations are configured for cooperative engagement with the holder’s “prongs” to permit precise manipulation. <i>See</i> Ferree at 7:66–8:12; Figs. 12A, 12B; Michelson at 12:38–15:53, 16:42–67, 17:35–18:22, 23:59–24:8; Figs. 15–24, 28–30, 35–37, 55–57; McLuen at Fig. 16, [0076].</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, Michelson, Palmatier, and/or McLuen, it would have been obvious to a person having ordinary skill in the art to modify those references or combine them with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
Claim 7	
<p>[7] The device of claim 1, wherein the third and fourth side portions define first and second indentations that extend into but not through the third and fourth side portions and that are configured to be grabbed by an insertion tool.</p>	<p>Claim 7 depends from Claim 1. Ferree discloses or renders obvious all limitations of Claim 1 as shown above.</p> <p>Ferree in combination with Michelson, Palmatier, and/or McLuen also discloses and/or renders obvious that the “third and fourth side portions” define “first and second indentations” extending into but not through the “third and fourth side portions”, configured to be grabbed by an “insertion tool”. Ferree discloses recessed coupling features on the posterior portion of the cage that receive an inserter and/or actuator tool (screw hole 118; the tool assembly of Fig. 8D). <i>See</i> Ferree at 7:66–8:12; Figs. 12A, 12B.</p> <p>To the extent Ferree is argued not to expressly disclose “first and second indentations” on the “third and fourth side portions” of the “second movable portion” configured to be grabbed by an “insertion tool”, Michelson discloses an expandable interbody spinal fusion implant 100 having dedicated “tool”-engagement</p>

Claims	Exemplary Citations to Prior Art
	<p>indentations (“slot” 126) on its trailing end. Michelson’s alternative implant 1100 has pin receiving holes 1126 on its trailing end engaged by pins 1210 of implant holder 1200. These slots 126 / pin receiving holes 1126 are “first and second indentations” configured to be grabbed by the “insertion tool”.</p> <p>Palmatier and McLuen also satisfy this limitation. See ’633 Chart re Palmatier; McLuen at Fig. 16, [0076].</p>  <p style="text-align: center;">Fig. 16</p> <p>McLuen at Fig. 16.</p>

Claims	Exemplary Citations to Prior Art
	 <p data-bbox="1045 711 1171 750">FIG. 17</p>  <p data-bbox="1012 1328 1150 1367">FIG. 22</p>

Claims	Exemplary Citations to Prior Art
	<p data-bbox="583 139 1100 172">Palmatier at Figs. 17-18, 22 (annotated).</p> <p data-bbox="583 198 1944 302">Each of the four rationales identified in [4] supports modifying Ferree's expandable cage to provide such indentations. See Ferree at 7:66–8:12; Figs. 12A, 12B; Michelson at 12:38–15:53, 16:42–67, 17:35–18:22, 23:59–24:8; Figs. 15–24, 28–30, 35–37, 55–57; '633 Chart re Palmatier; McLuen at Fig. 16, [0076].</p> <p data-bbox="583 328 1957 399">Roughly depicted, these indentations could appear like this on the side portions of the Ferree device (facing out of the page and on the opposite side of the implant, facing into the page).</p>  <p data-bbox="802 906 1117 984">Fig - 12B</p> <p data-bbox="583 1016 1961 1159">To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, Michelson, Palmatier, and/or McLuen, it would have been obvious to a person having ordinary skill in the art to modify those references or combine them with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation.</p>
Claim 8	
<p data-bbox="109 1247 499 1351">[8] A system comprising the device of claim 7, wherein the system further comprises:</p>	<p data-bbox="583 1247 1961 1312">Claim 8 depends from Claim 7. Ferree, alone or in combination with Michelson, Palmatier, and/or McLuen, discloses or renders obvious all limitations of Claim 7 as shown above.</p>

Claims	Exemplary Citations to Prior Art
<p>means for gripping and inserting the device.</p>	<p>Ferree discloses means for gripping and inserting the device (the tool with two prongs attached to the device, at least one via a screw hole), as discussed above with respect to Claim 4.</p> <p>Michelson further discloses means for gripping and inserting the device. Michelson’s implant holder 500 includes shaft 502 and outer sleeve 504, with the outer sleeve’s distal end 522 carrying upper and lower extensions 526, 528, and side extensions 530, each side extension having a flange 532 that engages “slot” 126 of implant 100 — the side extensions function as “prongs” that grip the trailing end of the implant during insertion. Michelson’s alternative implant holder 1200 has pins 1210 that engage pin receiving holes 1126 on implant 1100.</p> <p>Also discloses means for gripping and inserting the device. <i>See</i> McLuen at Fig. 16; <i>id.</i> at [0076] (“When performing surgery near someone's spine, it is preferable to prevent or at least minimize the slipping ability. To do so, channels 1522 are implemented to receive a tool (not shown). The tool (not shown) has attachments that fit within the channels 1522 to secure the tool (not shown) in place.”).</p> <p>Each of the four rationales identified in [4] supports using Michelson’s or McLuen’s prong-equipped holder instrument to grip and insert Ferree’s expandable cage. <i>See</i> Ferree at 7:66–8:12; Figs. 12A, 12B; Michelson at 12:38–15:53, 16:42–67, 17:35–18:22, 23:59–24:8; Figs. 15–24, 28–30, 35–37, 55–57; <i>see</i> McLuen at Fig. 16; <i>id.</i> at [0076]. Alternatively, for the same reasons, a person of skill in the art would have understood to turn the prongs of Michelson from outward-facing or front-facing prongs, as disclosed therein, to inward-facing prongs, as would be needed to interface with indentations on the side surfaces as discussed above, including with respect to McLuen and Palmatier.</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, Michelson, Palmatier, and/or McLuen, it would have been obvious to a person having ordinary skill in the art to modify these references or combine them with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
Claim 9	
<p>[9] The system of claim 8, and further comprising:</p> <p>means for turning the rotation screw with respect to the second movable portion and the wedge.</p>	<p>Claim 9 depends from Claim 8. Ferree, alone or in combination with Michelson, Palmatier, and/or McLuen, discloses or renders obvious all limitations of Claim 8 as shown above.</p> <p>Ferree, alone or in combination with Michelson, further discloses “means for turning the rotation screw with respect to the second movable portion and the wedge.” As discussed herein, Ferree discloses a rotation screw (threaded rod 1204) that turns with respect to the second movable portion and the wedge, turned from the operator side of the device. <i>See</i> Ferree at 7:66-8:12; Figs. 12A, 12B. Ferree thus necessarily</p>

Claims	Exemplary Citations to Prior Art
	<p>implies the use of a rotational “tool” that engages the threaded rod. Ferree at 7:66–8:12; Figs. 12A, 12B. This is especially so in light of the elongated nature of the other tools described in Ferree. <i>See</i> Ferree at Fig. 8D; <i>id.</i> at 6:5407:9.</p> <p>To the extent Ferree is argued not to expressly disclose a rotatable “tool” with a screw engagement portion, Michelson expressly discloses one. Michelson describes “a preferred embodiment of expander driver 600 for engaging and rotating expander 120,” (Michelson at 13:20–21) having a shaft 602 with a distal end 604 carrying a tip 614 that is “hex-shaped” to cooperatively engage opening 130 of the expander. The expander driver also includes a T-shaped handle 624 at its proximal end for manual rotation. Driver head 726 (in another embodiment) is described as having any of various forms suitable for actuating an expansion member, and may engage a set screw of the implant. Each of the four rationales identified in [4] supports using Michelson’s expander driver 600 — a rotatable “tool” with a screw engagement portion — to turn Ferree’s threaded rod 1204. <i>See</i> Ferree at 7:66–8:12; Figs. 12A, 12B; Michelson at 12:38–15:53, 16:42–67, 17:35–18:22, 23:59–24:8; Figs. 15–24, 28–30, 35–37, 55–57.</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree and/or Michelson, it would have been obvious to a person having ordinary skill in the art to modify Ferree and/or Michelson or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
Claim 10	
<p>[10] The device of claim 1, and further comprising:</p> <p>means for pivotably attaching the first movable portion to the second movable portion.</p>	<p>Claim 10 depends from Claim 1. Ferree discloses or renders obvious all limitations of Claim 1 as shown above.</p> <p>Ferree discloses this limitation. Ferree includes a hinge at point 1206 that pivotably attaches the lower member to the upper member. Ferree at 11A, 11B, 12A, 12B; <i>see also id.</i> at 7:52–8:12. The hinges depicted include a pin passing through corresponding knuckles on the upper and lower members. <i>See</i> Ferree at 7:66–8:12; Figs. 12A, 12B.</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree Michelson, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
Claim 11	

Claims	Exemplary Citations to Prior Art
<p>[11] The device of claim 1, wherein the first movable portion has a thickness that varies between the first end and the second end such that the first interior surface comprises a curved portion and a straight portion.</p>	<p>Claim 11 depends from Claim 1. Ferree or renders obvious all limitations of Claim 1 as shown above.</p> <p>Ferree discloses that the “first movable portion” has a thickness that varies between the “first end” and the “second end” such that the “first interior surface” comprises a curved portion and a straight portion. Fig. 12A shows the upper member with a thicker posterior portion at hinge point 1206 (where the hinge structure resides) and a thinner anterior section, with the interior surface of the upper member presenting a curved profile near the hinge transitioning to a substantially straight cam-engaging portion that bears on slug 1202. Figures 1 and 11A show this thickness difference even more clearly. Ferree further confirms that “either or both of the upper and lower member may be wider posteriorly (i.e., at 114) relative to the anterior thickness (i.e., at 116) to provide added strength in compression at the back of the spine.” Ferree at 5:33–36; <i>see also</i> Ferree at 7:66–8:12; Figs. 12A, 12B.</p> <p>Alternatively, Palmatier discloses this limitation, as described in detail in the ’633 Chart directed thereto, and it would have been obvious to include these aspects of Palmatier into Ferree, including because Palmatier offers substantially more description regarding the various features of an expandable implant than the limited depiction of Figures 12A to 12B of Ferree.</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree and/or Palmatier, it would have been obvious to a person having ordinary skill in the art to modify Ferree and/or Michelson or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
<p>Claim 12</p>	
<p>[12] The device of claim 1, wherein the wedge comprises opposing first and second side surfaces with first and second substantially flat portions, wherein the angled wedge surface extends between the first and second side surfaces and is substantially flat across the angled wedge surface from the first side surface to the second side surface.</p>	<p>Claim 12 depends from Claim 1. Ferree or renders obvious all limitations of Claim 1 as shown above.</p> <p>Ferree further discloses this limitation. Ferree discloses that the “wedge” comprises opposing first and second side surfaces with first and second substantially flat portions, with the “angled wedge surface” extending between them. Slug 1202 in Figs. 12A and 12B is shown with substantially flat, parallel opposing side surfaces along its axial length. Ferree describes the slug as bearing against the lower and upper members through its angled cam-engaging surface, with the side surfaces flanking that cam surface; given the symmetric nature of the cage and the requirement that slug 1202 translate axially within the channel between the upper and lower members, a person of ordinary skill would understand the slug’s side surfaces to be substantially flat and parallel. <i>See</i> Ferree at 7:66–8:12; Figs. 12A, 12B.</p>

Claims	Exemplary Citations to Prior Art
	<div data-bbox="596 142 961 337"> </div> <div data-bbox="1045 175 1331 328"> </div> <div data-bbox="680 380 827 418"> <p>Fig - 12A</p> </div> <div data-bbox="1129 380 1276 418"> <p>Fig - 12B</p> </div> <p data-bbox="583 444 1974 587">To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation.</p>
Claim 14	
<p>[14A] An expandable interbody device comprising:</p> <p>a top housing extending from a first end to a second end, wherein the top housing has first and second end portions positioned at the first and second ends, respectively, and has first and second side portions extending between the first and second end portions,</p>	<p>See discussion above with respect to claim limitation [1A], applying all discussion regarding the “first movable portion” to “a top housing.”</p>
<p>[14B] wherein the top housing has a first vertebral body engagement surface that is at least partially convex and has a first interior surface positioned on an opposite side of the top housing than the first vertebral body engagement surface,</p>	<p>See discussion above with respect to claim limitation [1B]. In addition, the ridges depicted on the top of the Ferree implant disclose that the “first vertebral body engagement surface” is “at least partially convex.” See Ferree at Fig. 12A, 12B; <i>see also id.</i> at 5:28-30 (disclosing that “[t]he superior and inferior surfaces preferably include grooves 113, as shown, or alternative surfacing to better engage with the endplates of the adjacent vertebrae for long-term stability.”). Ferree further expressly discloses that “[t]he superior and inferior surfaces may also be convex to better conform to endplate concavity.” <i>Id.</i> at 5:31-32.</p>

Claims	Exemplary Citations to Prior Art
	<div data-bbox="596 142 961 337"> </div> <div data-bbox="1045 175 1331 328"> </div> <div data-bbox="676 380 827 418"> <p>Fig - 12A</p> </div> <div data-bbox="1129 380 1272 418"> <p>Fig - 12B</p> </div> <p data-bbox="583 444 1974 587">To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
<p>[14C] wherein the top housing defines at least one first bone material receiving area extending through the top housing between the first and second end portions and the first and second side portions;</p>	<p>See discussion above with respect to Claim 2.</p>
<p>[14D] a bottom housing extending from a third end to a fourth end, wherein the bottom housing has third and fourth end portions positioned at the third and fourth ends, respectively, and has third and fourth side portions extending between the third and fourth end portions,</p>	<p>See discussion above with respect to claim limitation [1C], applying discussion regarding the “second movable portion” to the “bottom housing.”</p>
<p>[14E] wherein the bottom housing has a second vertebral body engagement surface that is at least partially convex and has a second interior surface positioned on an opposite side of the bottom</p>	<p>See discussion above with respect to claim limitations [1D], [14B].</p>

Claims	Exemplary Citations to Prior Art
housing than the second vertebral body engagement surface,	
[14F] wherein the bottom housing defines at least one second bone material receiving area extending through the bottom housing between the third and fourth end portions and the third and fourth side portions,	<i>See</i> discussion above with respect to Claim 2.
[14G] wherein the top housing is aligned with the bottom housing such that the first end of the top housing is axially aligned with the third end of the bottom housing and the second end of the top housing is axially aligned with the fourth end of the bottom housing,	<i>See</i> discussion above with respect to claim limitation [1E].
[14H] wherein the first end portion of the top housing and the third end portion of the bottom housing are hingedly interconnected such that the top housing can pivot with respect to the bottom housing so as to move the second end portion of the top housing away from the fourth end portion of the bottom housing,	<i>See</i> discussion above with respect to claim limitation [1F].
[14I] wherein a first length of the top housing from the first end to the second end is substantially equal to a second length of the bottom housing from the third end to the fourth end,	Ferree discloses that a first length of the “top housing” from the “first end” to the “second end” is substantially equal to a second length of the “bottom housing” from the “third end” to the “fourth end” . Fig. 12A shows the upper and lower members with substantially equal axial lengths from posterior to anterior; the symmetric cage form of implant 100 (Fig. 1) further confirms this. <i>See</i> Ferree at 7:66–8:12 Figs. 12A, 12B.

Claims	Exemplary Citations to Prior Art
	<div data-bbox="604 159 995 363"> </div> <div data-bbox="688 412 848 451">Fig - 12A</div> <div data-bbox="1087 191 1394 354"> </div> <div data-bbox="1180 412 1339 451">Fig - 12B</div> <p data-bbox="583 500 1990 639">To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants' Invalidity Contentions Cover Pleading that disclose this limitation.</p>
<p>[14J] and wherein the second end portion of the top housing is smaller than the fourth end portion of the bottom housing such that the second end portion of the top housing is positionable between the third and fourth side portions of the bottom housing at the fourth end of the bottom housing;</p>	<p>As set forth above with respect to claim limitation [1G], Ferree discloses and/or suggests “wherein the second end portion of the first body is smaller than the fourth end portion of the second body such that the second end portion of the first body is positionable between the third and fourth side portions of the second body at the fourth end of the second body.” As set forth above, Ferree discloses that “the cage may be constructed such that a portion of the top or bottom half sleeves over the other half, thereby closing the side openings when the two halves are put together.” Ferree at 5:66-6:4. A person of skill in the art would have been motivated to apply this teaching to the Ferree Figs. 12A-12B embodiment such that the upper body could fit within the lower body.</p> <div data-bbox="596 987 982 1201"> </div> <div data-bbox="709 1263 932 1321">Fig - 6A</div> <div data-bbox="1339 997 1541 1192"> </div> <div data-bbox="1339 1263 1562 1321">Fig - 6B</div> <p data-bbox="583 1360 877 1393">Ferree at Figs. 6A, 6B.</p>

Claims	Exemplary Citations to Prior Art
	<p>Per the four-rationale framework set out in [1G], to the extent this nesting is argued not to be expressly part of the Fig. 12 embodiment, it would have been obvious within Ferree to apply the Fig. 6A/6B sleeving arrangement to the Fig. 12 cage. See Ferree at 7:66–8:12; Figs. 12A, 12B.</p> <p>To the extent Moskowitz argues this limitation is not disclosed or rendered obvious by Ferree, it would have been obvious to a person having ordinary skill in the art to modify Ferree or combine it with any of the other prior art references identified in Defendants’ Invalidity Contentions Cover Pleading that disclose this limitation.</p>
[14K] a wedge extending from a fifth end to a sixth end and having an angled wedge surface extending along at least a portion of a distance between the fifth end and the sixth end,	<i>See above discussion with respect to claim limitation [1I].</i>
[14L] wherein the wedge is positioned between the top housing and the bottom housing with the angled wedge surface facing the first interior surface of the top housing,	<i>See above discussion with respect to claim limitation [1J].</i>
[14M] wherein the first interior surface of the top housing has an angled housing surface shaped to engage the angled wedge surface of the wedge, wherein a distance from the fifth end to the sixth end of the wedge is less than a distance from the first end to the second end of the top housing and is less than a distance from the third end to the fourth end of the bottom housing,	<i>See above discussion with respect to claim limitation [1K].</i>
[14N] wherein the wedge is configured to slide within a space defined by the top and bottom	<i>See above discussion with respect to claim limitation [1L].</i>

Claims	Exemplary Citations to Prior Art
<p>housings in a direction toward the second and fourth ends of the top and bottom housings from a first wedge position that allows the top and bottom housings to pivot to a housing position that is substantially closed to a second wedge position whereby the angled wedge surface presses against the first interior surface of the top housing to hingedly open the top housing with respect to the bottom housing whereby the wedge remains axially confined within the space defined by the top and bottom housings in the first and second wedge positions; and</p>	
<p>[14O] a rotation screw operably connected to the wedge and to the bottom housing, wherein rotation of the rotation screw moves the wedge in an axially translating direction with respect to the top housing and the bottom housing within the space defined by the first and bottom housings from the first wedge position to the second wedge position.</p>	<p><i>See above discussion with respect to claim limitation [1M].</i></p>
<p>Claim 16</p>	
<p>[16] The device of claim 14, wherein the first housing has a thickness that varies between the first end and the second end such that the first interior surface has at</p>	<p>Claim 16 depends from Claim 14. Ferree, alone or in combination with the other prior art referenced herein, discloses or renders obvious all limitations of Claim 14 as shown above.</p> <p><i>See discussion above with respect to Claim 11.</i></p>

Claims	Exemplary Citations to Prior Art
least one curved portion and at least one straight portion.	
Claim 17	
[17] The device of claim 14, and further comprising means for attaching the first end portion of the top housing to the third end portion of the bottom housing.	Claim 17 depends from Claim 14. Ferree, alone or in combination with the other prior art referenced herein, discloses or renders obvious all limitations of Claim 14 as shown above. <i>See</i> discussion above with respect to Claim 10.
Claim 19	
[19A] An expandable interbody device comprising: a first housing extending from a first end to a second end, wherein the first housing has first and second end portions positioned at the first and second ends, respectively, and has first and second side portions extending between the first and second end portions,	<i>See</i> discussion above with respect to claim limitation [1A], applying all discussion regarding the “ first movable portion ” to “ a first housing. ”
[19B] wherein the first housing has a first vertebral body engagement surface and has a first interior surface positioned on an opposite side of the first housing than the first vertebral body engagement surface,	<i>See</i> discussion above with respect to claim limitation [1B].
[19C] wherein the first housing defines a first bone material receiving area between the first and second end portions and the first and second side portions;	<i>See</i> discussion above with respect to Claim 2.

Claims	Exemplary Citations to Prior Art
[19D] a second housing extending from a third end to a fourth end, wherein the second housing has third and fourth end portions positioned at the third and fourth ends, respectively, and has third and fourth side portions extending between the third and fourth end portions,	<i>See</i> discussion above with respect to claim limitation [1C], applying discussion regarding the “ second movable portion ” to the “ bottom housing .”
[19E] wherein the second housing has a second vertebral body engagement surface and has a second interior surface positioned on an opposite side of the second housing than the second vertebral body engagement surface,	<i>See</i> discussion above with respect to claim limitation [1D].
[19F] wherein the second housing defines a second bone material receiving area between the third and fourth end portions and the third and fourth side portions,	<i>See</i> discussion above with respect to Claim 2.
[19G] wherein the third and fourth side portions define first and second indentations configured to be grabbed by an insertion tool,	<i>See</i> discussion above with respect to Claim 4.
[19H] wherein the first end portion of the first housing is hingedly connected to the third end portion of the second housing such that the first housing can pivot with respect to the second housing so as to move the second end portion of the first housing away from the	<i>See</i> discussion above with respect to claim limitation [1F].

Claims	Exemplary Citations to Prior Art
fourth end portion of the second housing,	
[19I] wherein the second housing defines a slot in the fourth end portion between the third and fourth side portions that is sized to receive the second end portion of the first housing such that the second end of the first housing and the fourth end of the second housing are axially aligned;	<i>See</i> discussion above with respect to claim limitation [1G].
[19J] wherein the first housing is aligned with the second housing such that the first end of the first housing is axially aligned with the third end of the second housing and the second end of the first housing is axially aligned with the fourth end of the second housing,	<i>See</i> discussion above with respect to claim limitation [1E].
[19K] a wedge extending from a fifth end to a sixth end with an angled wedge surface extending along a portion of a distance between the fifth end and the sixth end and with first and second opposing side surfaces on opposite sides of the angled wedge surface,	<i>See</i> discussion above with respect to claim limitation [1I], Claim 12.
[19L] wherein the wedge is positioned between the first housing and the second housing with the angled wedge surface facing the first interior surface of the first housing,	<i>See</i> discussion above with respect to claim limitation [1J].

Claims	Exemplary Citations to Prior Art
<p>[19M] wherein the first interior surface of the first housing has an angled housing surface shaped to engage the angled wedge surface of the wedge, wherein a distance from the fifth end to the sixth end of the wedge is less than a distance from the first end to the second end of the first housing and is less than a distance from the third end to the fourth end of the second housing,</p>	<p><i>See discussion above with respect to claim limitation [1K].</i></p>
<p>[19N] wherein the wedge is configured to slide within a space defined between the first and second housings in a direction toward the second and fourth ends of the first and second housings from a first wedge position that allows the first and second housings to pivot to a housing position that is substantially closed to a second wedge position whereby the angled wedge surface presses against the first interior surface of the first housing to hingedly open the first housing with respect to the second housing whereby the wedge remains axially confined within the space defined between the first and second housings in the first and second wedge positions; and</p>	<p><i>See discussion above with respect to claim limitation [1L].</i></p>

Claims	Exemplary Citations to Prior Art
[19O] a rotation screw operably connected to the wedge and to the second housing, wherein rotation of the rotation screw moves the wedge in an axially translating direction with respect to the first housing and the second housing within the space defined between the first and second housings from the first wedge position to the second wedge position.	<i>See</i> discussion above with respect to claim limitation [1M].
Claim 20	
[20A] A system comprising the device of claim 19, wherein the device further comprises means for attaching the first end of the first housing to the third end of the second housing and wherein the system further comprises:	Claim 20 depends from Claim 19. Ferree, alone or in combination with the other prior art referenced herein, discloses or renders obvious all limitations of Claim 19 as shown above. <i>See</i> discussion above with respect to Claim 10.
[20B] means for gripping and inserting the device; and	<i>See</i> discussion above with respect to Claim 8.
[20C] means for turning the rotation screw with respect to the second movable portion and the wedge.	<i>See</i> discussion above with respect to Claim 9.