Claim of the '734 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	Col. 10, ll. 57-64; Col. 13, ll. 30-57) The '348 patent discloses insertion of the harvester 270 including bone plug 118 into a cannulated cylindrical endoscopic delivery guide (i.e. cannula) (Col. 10, l. 65 – Col. 11, l. 9; Col. 13, ll. 40-49) The '348 patent discloses a harvester 270 that is adapted to be slidably received in the cutting element bore 248, that includes a distal cavity 280 for receiving the bore plug cut by the cutting element 232 and through which the bone plug can enter bone at a low delivery pressure (Figs. 11-14; Col. 11, l.63-Col. 12, l. 13; Col. 12, ll. 55-61; Col.13, ll. 30-57) The '196 patent discloses graft and recipient harvesters with collared pins for transplantation of graft into the bone; delivery of this material can be at low pressure. (Abstract; Col. 2, ll. 16-27)
and a tamping instrument having a tamping terminus which, during advancement of the tamping instrument in the subcutaneous cannula, urges material residing in the subcutaneous cannula into bone.	At the time of the effective filing date of the '734 patent, the insertion of a tamping instrument into a hollow tube (such as the cannula or nozzle instrument disclosed in the '734 patent) in order to deliver material residing therein into bone would have been obvious to one of ordinary skill in the art. This element is anticipated and rendered obvious by each of the '631 and '333 patents, as set forth in the anticipation charts with respect to the '734 patent. The '263 patent discloses a syringe plunger member 10 capable of advancement into the syringe barrel member 20 and having a terminus 14 and plunger extension 54 which during advancement urges material residing in the syringe barrel member 20 into the extension nozzle member 44 or 56 into bone (Figs. 1-7; Col. 4, ll. 24-Col. 5, l.2; Col. 6, ll. 50-65) The '152 patent discloses a ram 10 having a terminus capable of advancing in the nozzle tube 7 to eject bone cement from the nozzle tube 7 into bone. (Figs. 3-5; Col. 1, ll. 54-56; Col. 1, l. 62-Col. 2, l. 2; Col. 3, ll. 25-33, 46-56) The '261 patent discloses a graft delivery piston 120 capable of advancement in the delivery cannula 111 and having a terminus which, during the advancement, urges graft material from the cannula into the fusion site.

Claim of the '734 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	(Figs. 20-21; Col. 13, ll. 41-59) The '348 patent discloses plunger 292 with terminus capable of advancement in the cannula to urge the bone plug into the bone hole, because the plunger has length sufficient to push bone plug 118 out of harvester cavity 280 and preferably 1-5 mm further. (Fig. 14; Col. 13, ll. 30-57) The '196 patent discloses a collared pin 26 with terminus capable of advancement in the hollow tube harvester 2 to urge the graft into the bone (Figs. 2, 5, 19; Col. 2, ll.16-23; Col. 3, ll. 19-30; Col. 5, ll. 24-38; Col. 8, ll. 20-27)
16. Apparatus according to claim 15 wherein the delivery device comprises a syringe.	*See* above at claim 15. The '263 patent discloses a filling device member 68 for loading of the implant substances into the syringe barrel. (Abstract; Col. 3, ll. 14-16; Figs. 8-9; Col. 5, l. 31–Col. 6, l. 3; Col. 6, ll. 22-40) The '152 patent discloses a cylinder tube 1 for receiving the bone cement with piston 12 (i.e. delivery device) which comprises a syringe. (Figs. 1 and 5; Col. 1, ll. 40-49; Col. 2, ll. 52-55; Col. 3, ll. 34-45)
17. Apparatus according to claim 15 wherein the tamping instrument includes marking to visually gauge the advancement of the tamping terminus through the subcutaneous cannula.	*See* above at claim 15. At the time of the effective filing date of the '734 patent, the inclusion of markings on a hollow tube (such as the cannula or nozzle instrument disclosed in the '734 patent) and/or markings on a tamping instrument inserted into the hollow tube (such as the cannula or nozzle instrument disclosed in the '734 patent), in order to measure the advancement of one instrument in relation to the other, would have been obvious to one of ordinary skill in the art. At the time of the filing date of the '734 patent, it was common for medical instruments, such as syringes, to include markings to measure the advancement of one instrument in relation to another. The '152 patent discloses a ram 10 with spaced circular discs 16 for guiding the ram in the nozzle tube 7. (Figs. 3-5; Col. 4, ll. 14-16). These spaced circular discs can serve as markings to visually gauge the advancement of

Claim of the '734 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	the ram. The '196 patent discloses a harvester 2 with markings 12 for visual confirmation of depth during insertion (Fig. 1; col. 2, ll. 33-42; Col. 4, ll. 55-50; Col. 5, ll. 14-18)
19. Apparatus according to claim 15 wherein the tamping instrument is made of a generally rigid material.	*See* above at claim 15. This element is anticipated and rendered obvious by each of the '631 and '333 patents, as set forth in the anticipation charts with respect to the '734 patent. The '263 patent discloses that all components, including the syringe plunger member 10, can be made of delrin, a generally rigid material. (Col. 2, ll. 39-42) The '152 patent discloses a ram 10, which includes an instrument made of generally rigid material. (Fig. 4, Col. 1, ll.54-56; Col. 1, l. 66-Col. 2, l. 2; Col. 3, ll. 19-33) The '261 patent discloses a graft delivery piston 120, which includes an instrument made of generally rigid material. (Fig. 3; Col. 1, ll. 50-53; Col. 3, ll. 3-18) The '348 patent discloses a plunger 292 that can be made of a generally rigid material. (Fig. 14; Col. 13, ll. 52-57) The '196 patent discloses a collared pin 26 that can be made of a generally rigid material. (Fig. 5; Col. 2, ll. 20-23; Col. 3, ll. 19-27; Col. 5, ll. 19-38)
20. Apparatus according to claim 15 and further including a cavity forming instrument capable of advancement through the subcutaneous cannula to compress cancellous bone.	*See* above at claim 15. The '404 patent discloses an inflatable cavity forming instrument capable of advancement through the subcutaneous cannula (part 30) to compress cancellous bone. (Figs. 21-24; Col. 6, l. 65 – Col. 7 l. 36)
21. Apparatus according to claim 15 wherein the cavity forming instrument includes an expandable structure.	*See* above at claim 15. The '404 patent discloses an inflatable cavity forming instrument that includes an expandable structure. (*passim*]

OBVIOUSNESS OF '054 IN VIEW OF ONE OR MORE OF '631, '333, '152, '263, '404, '261, '196 AND/OR '348 PATENTS

It is my opinion that one or more of the asserted claims of the '054 patent is rendered obvious by one or more of the following prior art references: U.S. Patent Nos. 5,415,631, 5,312,333, 4,576,152, 4,801,263, 5,108,404, 5,741,261, 5,919,196 and/or 6,017,348. To one of ordinary skill in the art, there would have been a suggestion and motivation to combine any of the references above because all of the references pertain to the delivery of material into the bone. In addition, it is my opinion that many of the elements of the claims of the '054 patent are not novel at all. For instance, at the time of the effective filing date of the '054 patent, the insertion of a tamping instrument into a hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent) in order to deliver material residing therein into bone would have been obvious to one of ordinary skill in the art. It is further my opinion that the inclusion of markings on a hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent) and markings on a tamping instrument inserted into the hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent), in order to measure the advancement of one instrument in relation to the other, would have been obvious to one of ordinary skill in the art. At the time of the filing date of the '054 patent, it was common for medical instruments, such as syringes, to include markings to measure the advancement of one instrument in relation to another. The table below sets forth

the elements that each of the references teaches. I reserve the right to supplement, modify or amend my opinions.

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
26. Apparatus for delivering material into bone comprising a cannula for establishing a subcutaneous path into bone, and	'631 patent discloses an endoscopic device that delivers a quantity of material to a remote location within the body (such as into bone). (Abstract; Col. 1, ll. 10-14; Col. 5, ll. 52-57) The '631 discloses the insertion of the endoscopic shaft 26 through a subcutaneous cannula. (Col. 3, ll. 58-61) '333 patent discloses an endoscopic device that delivers a quantity of material to a remote location within the body (such as into bone). (Abstract; Col. 1, ll. 6-10; Col. 5, ll. 47-52) The '333 discloses the insertion of the endoscopic shaft 26 through a subcutaneous cannula. (Col. 3, ll. 55-58) The '263 patent discloses an osseous implant syringe for introducing substances into interdental bone. (Abstract) The '263 patent discloses an extension nozzle member 44 (i.e. cannula) or curved extension nozzle member 56 (i.e. cannula) (Figs. 4-7; Col. 2, l. 66- Col 3, l.7; Col. 4, l. 47- Col. 5, l. 30; Col. 6, ll. 51-Col. 7, l. 11) The '152 patent discloses an injector for bone cement into a bone cavity. (Abstract; Col. 1, ll.4-7, 57-61; Col. 3, ll. 41-45; Col. 3, l. 64- Col. 4, l. 4) The '152 patent discloses a nozzle tube 7 that establishes a path into the bone cavity. (Figs. 1 and 3; Col. 1, l. 40-Col. 2, l. 2; Col. 3, ll. 46-51) The '261 patent discloses an endosurgical graft delivery assembly for introducing material into bone with delivery cannula 111 (Figs. 20-21; Col. 10, ll. 41-49, Col. 13, ll. 41-59). The '348 patent discloses a bone emplacement tool that inserts a bone plug into the bone hole. (Col. 6, ll. 56- 58; Col. 10, ll. 57-64; Col. 13, ll. 30-57) The '348 patent discloses insertion of the harvester 270 including bone plug 118 into a cannulated cylindrical endoscopic delivery guide (i.e. cannula) (Col. 10, l. 65- Col. 11, l. 9;

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	Col. 13, ll. 40-49). The '196 patent discloses graft and recipient harvesters with collared pins for transplantation of graft into the bone. (Abstract; Col. 2, ll. 16-27)
a tamping instrument having a tamping terminus and including at least one marking to visually gauge the advancement of the terminus relative to the distal end of the cannula,	At the time of the effective filing date of the '054 patent, the inclusion of markings on a hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent) and/or markings on a tamping instrument inserted into the hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent), in order to measure the advancement of one instrument in relation to the other, would have been obvious to one of ordinary skill in the art. At the time of the filing date of the '054 patent, it was common for medical instruments, such as syringes, to include markings to measure the advancement of one instrument in relation to another. The '631 patent discloses a plunger member 118 (i.e. tamping instrument) having a terminus portion 124 or 128 capable of advancement into the subcutaneous cannula, and which, during advancement, urges material residing in the subcutaneous cannula into the body (which includes bone); the portion 124 or 128 thereof follows the material out of the end of the endoscopic member and protrudes therefrom to maneuver the material. (Figs. 6 and 7; Col. 3, ll. 58-61; Col. 5, ll. 39-61) The '333 patent discloses a plunger member 118 (i.e. tamping instrument) having a terminus portion 124 or 128 capable of advancement into the subcutaneous cannula, and which, during advancement, urges material residing in the subcutaneous cannula into the body (which includes bone); the portion 124 or 128 thereof follows the material out of the end of the endoscopic member and protrudes therefrom to maneuver the material. (Figs. 6 and 7; Col. 3, ll. 55-58; Col. 5, ll. 34-56) The '263 patent discloses a syringe plunger member 10 capable of advancement into the syringe barrel member 20 and having a terminus 14 and plunger extension 54

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	which during advancement urges material residing in the syringe barrel member 20 into the extension nozzle member 44 or 56 into bone (Figs. 1-7; Col. 4, ll. 24-Col. 5, l.2; Col. 6, ll. 50-65) The '152 patent discloses a ram 10 having a terminus capable of advancing in the nozzle tube 7 to eject bone cement from the nozzle tube 7 into bone. (Figs. 3-5; Col. 1, ll. 54-56; Col. 1, l. 62-Col. 2, l. 2; Col. 3, ll. 25-33, 46-56) The '152 patent further discloses a ram 10 with spaced circular discs 16 for guiding the ram in the nozzle tube 7. (Figs. 3-5; Col. 4, ll. 14-16). These spaced circular discs can serve as markings to visually gauge the advancement of the ram. The '261 patent discloses a graft delivery piston 120 capable of advancement in the delivery cannula 111 and having a terminus which, during the advancement, urges graft material from the cannula into the fusion site. (Figs. 20-21; Col. 13, ll. 41-59) The '348 patent discloses plunger 292 with terminus capable of advancement in the cannula to urge the bone plug into the bone hole, because the plunger has length sufficient to push bone plug 118 out of harvester cavity 280 and preferably 1-5 mm further. (Fig. 14; Col. 13, ll. 30-57) The '196 patent discloses a collared pin 26 with terminus capable of advancement in the hollow tube harvester 2 to urge the graft into the bone (Figs. 2, 5, 19; Col. 2, ll.16-23; Col. 3, ll. 19-30; Col. 5, ll. 24-38; Col. 8, ll. 20-27) The '196 patent discloses a harvester 2 with markings 12 for visual confirmation of depth during insertion (Fig. 1; Col. 2, ll. 33-42; Col. 4, ll. 55-50; Col. 5, ll. 14-18)
the tamping instrument being sized and configured for manipulation independent of the cannula to enable insertion of the tamping instrument into the cannula, advancement of the tamping terminus in the	At the time of the effective filing date of the '054 patent, the insertion of a tamping instrument into a hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent) in order to deliver material residing therein into bone would have been obvious to one of ordinary skill in the art. The '631 patent discloses a plunger member 118 (i.e.

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
cannula to urge material residing in the cannula into bone, and withdrawal of the tamping terminus from the cannula.	tamping instrument) having a terminus portion 124 or 128 capable of advancement into the subcutaneous cannula, and which, during advancement, urges material residing in the subcutaneous cannula into the body (which includes bone); the portion 124 or 128 thereof follows the material out of the end of the endoscopic member and protrudes therefrom to maneuver the material. (Figs. 6 and 7; Col. 3, ll. 58-61; Col. 5, ll. 39-61) The '333 patent discloses a plunger member 118 (i.e. tamping instrument) having a terminus portion 124 or 128 capable of advancement into the subcutaneous cannula, and which, during advancement, urges material residing in the subcutaneous cannula into the body (which includes bone); the portion 124 or 128 thereof follows the material out of the end of the endoscopic member and protrudes therefrom to maneuver the material. (Figs. 6 and 7; Col. 3, ll. 55-58; Col. 5, ll. 34-56) The '263 patent discloses a syringe plunger member 10 sized and configured for manipulation independent of the syringe barrel member 20 to enable insertion of the plunger member 10 into barrel member 20, advancement of the end 14 and plunger extension 54 into the barrel member 20 and extension nozzle member 44 or 56 to urge material residing therein into bone, and withdrawal of the tamping terminus from the barrel member 20. (Figs. 1-7; Col. 4, ll. 24-Col. 5, l.2; Col. 6, ll. 50-65) The '152 patent discloses a ram 10 being sized and configured for manipulation independent of the nozzle element. (Figs. 3-4, Col. 1, ll. 54-56; Col. 1, l. 66-Col. 2, l. 4; Col. 3, ll. 19-33) The '152 patent discloses a ram 10 having a terminus capable of advancement and withdrawal from the nozzle tube 7 to eject bone cement from the nozzle tube 7 into bone. (Figs. 3-5; Col. 1, ll. 54-56, Col. 1, l. 62 - Col. 2, l. 4; Col. 3, ll. 25-33, 46-56) The '261 patent discloses a graft delivery piston 120 sized and configured for manipulation independent of delivery cannula 111 to enable insertion of piston 120

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	into the delivery cannula 111, advancement of the terminus of piston 120 in delivery cannula 111 to urge graft material into the fusion site in the bone, and withdrawal of the terminus of piston 120 from the delivery cannula 111. (Figs. 20-21; Col. 13, ll. 41-59) The '348 patent discloses removable plunger 292 sized and configured for manipulation independent of the harvester 270 to enable insertion of the removable plunger 292 into harvester 270, advancement of the plunger terminus in the harvester in the harvester 270 to urge material residing therein into bone, and withdrawal of the plunger terminus from the harvester 270; the plunger terminus is capable of advancement in the cannula to urge the bone plug into the bone hole, because the plunger has length sufficient to push bone plug 118 out of harvester cavity 280 and preferably 1-5 mm further. (Fig. 14; Col. 13, ll. 30-57) The '196 patent discloses a removable collared pin 26 sized and configured for manipulation independent of the harvester 2 to enable insertion of the pin 26 into harvester 2, advancement of the pin terminus in the harvester 2 to urge material residing therein into bone, and withdrawal of the pin terminus from the harvester 2 (Figs. 2, 5, 19; Col. 2, ll. 16-23; Col. 3, ll. 19-30; Col. 5, ll. 24-38; Col. 8, ll. 20-27)
27. Apparatus according to claim 26 wherein the at least one marking indicates when the distal end of the tamping instrument is aligned with the distal end of the cannula instrument.	*See* above at claim 26.
28. Apparatus according to claim 26 wherein the tamping instrument includes a set point marking spaced from the terminus at a distance generally equal to the length of the cannula.	*See* above at claim 26.

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
29. Apparatus according to claim 27 wherein the tamping instrument includes at least one additional marking to visually gauge advancement of the terminus relative to the distal end of the cannula.	*See* above at claim 27.
36. Apparatus for delivering material into bone comprising a cannula for establishing a subcutaneous path into bone; and	'631 patent discloses an endoscopic device that delivers a quantity of material to a remote location within the body (such as into bone). (Abstract; Col. 1, ll. 10-14; Col. 5, ll. 52-57) The '631 discloses the insertion of the endoscopic shaft 26 through a subcutaneous cannula. (Col. 3, ll. 58-61) '333 patent discloses an endoscopic device that delivers a quantity of material to a remote location within the body (such as into bone). (Abstract; Col. 1, ll. 6-10; Col. 5, ll. 47-52) The '333 discloses the insertion of the endoscopic shaft 26 through a subcutaneous cannula. (Col. 3, ll. 55-58) The '263 patent discloses an osseous implant syringe for introducing substances into interdental bone. (Abstract) The '263 patent discloses an extension nozzle member 44 (i.e. cannula) or curved extension nozzle member 56 (i.e. cannula) (Figs. 4-7; Col. 2, l. 66- Col 3, l.7; Col. 4, l. 47- Col. 5, l. 30; Col. 6, ll. 51-Col. 7, l. 11) The '152 patent discloses an injector for bone cement into a bone cavity. (Abstract; Col. 1, ll.4-7, 57-61; Col. 3, ll. 41-45; Col. 3, l. 64- Col. 4, l. 4) The '152 patent discloses a nozzle tube 7 that establishes a path into the bone cavity. (Figs. 1 and 3; Col. 1, l. 40-Col. 2, l. 2; Col. 3, ll. 46-51) The '261 patent discloses an endosurgical graft delivery assembly for introducing material into bone with delivery cannula 111 (Figs. 20-21; Col. 10, ll. 41-49, Col. 13, ll. 41-59). The '348 patent discloses a bone emplacement tool that inserts a bone plug into the bone hole. (Col. 6, ll. 56- 58; Col. 10, ll. 57-64; Col. 13, ll. 30-57) The '348 patent

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	discloses insertion of the harvester 270 including bone plug 118 into a cannulated cylindrical endoscopic delivery guide (i.e. cannula) (Col. 10, l. 65- Col. 11, l. 9; Col. 13, ll. 40-49). The '196 patent discloses graft and recipient harvesters with collared pins for transplantation of graft into the bone. (Abstract; Col. 2, ll. 16-27)
a tamping instrument for advancement through the cannula including at least one marking to visually gauge the advancement of the terminus relative to the distal end of the cannula	At the time of the effective filing date of the '054 patent, the inclusion of markings on a hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent) and/or markings on a tamping instrument inserted into the hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent), in order to measure the advancement of one instrument in relation to the other, would have been obvious to one of ordinary skill in the art. At the time of the filing date of the '054 patent, it was common for medical instruments, such as syringes, to include markings to measure the advancement of one instrument in relation to another. At the time of the effective filing date of the '054 patent, the insertion of a tamping instrument into a hollow tube (such as the cannula or nozzle instrument disclosed in the '734 patent) in order to deliver material residing therein into bone would have been obvious to one of ordinary skill in the art. The '631 patent discloses a plunger member 118 (i.e. tamping instrument) having a terminus portion 124 or 128 capable of advancement into the subcutaneous cannula, and which, during advancement, urges material residing in the subcutaneous cannula into the body (which includes bone); the portion 124 or 128 thereof follows the material out of the end of the endoscopic member and protrudes therefrom to maneuver the material. (Figs. 6 and 7; Col. 3, ll. 58-61; Col. 5, ll. 39-61) The '333 patent discloses a plunger member 118 (i.e. tamping instrument) having a terminus portion 124 or 128 capable of advancement into the subcutaneous cannula, and which, during advancement, urges material residing in the subcutaneous cannula into the

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	body (which includes bone); the portion 124 or 128 thereof follows the material out of the end of the endoscopic member and protrudes therefrom to maneuver the material. (Figs. 6 and 7; Col. 3, ll. 55-58; Col. 5, ll. 34-56) The '263 patent discloses a syringe plunger member 10 capable of advancement into the syringe barrel member 20 and having a terminus 14 and plunger extension 54 which during advancement urges material residing in the syringe barrel member 20 into the extension nozzle member 44 or 56 into bone (Figs. 1-7; Col. 4, ll. 24-Col. 5, l.2; Col. 6, ll. 50-65) The '152 patent discloses a ram 10 having a terminus capable of advancing in the nozzle tube 7 to eject bone cement from the nozzle tube 7 into bone. (Figs. 3-5; Col. 1, ll. 54-56; Col. 1, l. 62-Col. 2, l. 2; Col. 3, ll. 25-33, 46-56) The '152 patent further discloses a ram 10 with spaced circular discs 16 for guiding the ram in the nozzle tube 7. (Figs. 3-5; Col. 4, ll. 14-16). These spaced circular discs can serve as markings to visually gauge the advancement of the ram. The '261 patent discloses a graft delivery piston 120 capable of advancement in the delivery cannula 111 and having a terminus which, during the advancement, urges graft material from the cannula into the fusion site. (Figs. 20-21; Col. 13, ll. 41-59) The '348 patent discloses plunger 292 with terminus capable of advancement in the cannula to urge the bone plug into the bone hole, because the plunger has length sufficient to push bone plug 118 out of harvester cavity 280 and preferably 1-5 mm further. (Fig. 14; Col. 13, ll. 30-57) The '196 patent discloses a collared pin 26 with terminus capable of advancement in the hollow tube harvester 2 to urge the graft into the bone (Figs. 2, 5, 19; Col. 2, ll.16-23; Col. 3, ll. 19-30; Col. 5, ll. 24-38; Col. 8, ll. 20-27) The '196 patent discloses a harvester 2 with markings 12 for visual confirmation of depth during insertion (Fig. 1; Col. 2, ll. 33-42; Col. 4, ll. 55-50; Col.

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	5, ll. 14-18)
and comprising a body portion and a handle portion, the handle portion having a cross-sectional area greater than the cross-sectional area of the body portion.	The '631 patent discloses a plunger member 118 (i.e. tamping instrument) comprising a body portion 118 and a handle portion (e.g. grip portion 100), the handle portion having a cross-sectional area greater than the cross-sectional area of the body portion. (Col. 5, ll. 6-43) The '333 patent discloses a plunger member 118 (i.e. tamping instrument) comprising a body portion 118 and a handle portion (e.g. grip portion 100), the handle portion having a cross-sectional area greater than the cross-sectional area of the body portion. (Col. 5, ll. 1-38) The '263 patent discloses a syringe plunger member 10 having a piston rod 11 (i.e. body portion) and handle 18 with handle portion having a cross-sectional area greater than the cross-sectional area greater than the cross-sectional area of the body portion. (Fig. 1; Col. 3, ll. 57-64) The '152 patent discloses a ram 10 with body portion 14 and handle 11, the handle portion having a cross-sectional area greater than the cross-sectional area of the body portion; the ram can be attached to piston 12. (Figs. 4-5; Col. 3, ll. 19-33) The '261 patent discloses a graft delivery piston 12 with knurled gripping portion 121 that includes a piston with handle portion having a cross-sectional area greater than the cross-sectional area of the body portion. (Figs. 20-21; Col. 13, ll. 41-59) The '348 patent discloses a plunger 292 comprising a shaft 294 and handle portion, the handle portion having a cross-sectional area greater than the cross-sectional area of the body portion. (Fig. 5, 1; Col. 6, ll. 42-48; Col. 13, ll. 51-57) The '196 patent discloses a collared pin comprising a collar 32 and handle 30. (Fig. 5, ll.19-38)
37. Apparatus according to	*See* above at claim 36.

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
claim 36 wherein the at least one marking indicates when the distal end of the tamping instrument is aligned with the distal end of the cannula instrument.	
38. Apparatus according to claim 36 wherein the tamping instrument includes a set point marking spaced from the terminus at a distance generally equal to the length of the cannula.	*See* above at claim 36.
39. Apparatus according to claim 38 wherein the tamping instrument includes at least one additional marking to visually gauge advancement of the terminus relative to the distal end of the cannula.	*See* above at claim 38.
41. Apparatus for delivering material into bone comprising a cannula for establishing a subcutaneous path into bone; and	'631 patent discloses an endoscopic device that delivers a quantity of material to a remote location within the body (such as into bone). (Abstract; Col. 1, ll. 10-14; Col. 5, ll. 52-57) The '631 discloses the insertion of the endoscopic shaft 26 through a subcutaneous cannula. (Col. 3, ll. 58-61) '333 patent discloses an endoscopic device that delivers a quantity of material to a remote location within the body (such as into bone). (Abstract; Col. 1, ll. 6-10; Col. 5, ll. 47-52) The '333 discloses the insertion of the endoscopic shaft 26 through a subcutaneous cannula. (Col. 3, ll. 55-58) The '263 patent discloses an osseous implant syringe for introducing substances into interdental bone. (Abstract) The '263 patent discloses an extension nozzle member 44 (i.e. cannula) or curved extension nozzle member 56 (i.e. cannula) (Figs. 4-7; Col. 2, l. 66- Col 3, l.7; Col. 4, l. 47- Col. 5, l. 30; Col. 6, ll. 51-Col. 7, l. 11)

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	The '152 patent discloses an injector for bone cement into a bone cavity. (Abstract; Col. 1, ll.4-7, 57-61; Col. 3, ll. 41-45; Col. 3, l. 64- Col. 4, l. 4) The '152 patent discloses a nozzle tube 7 that establishes a path into the bone cavity. (Figs. 1 and 3; Col. 1, l. 40-Col. 2, l. 2; Col. 3, ll. 46-51) The '261 patent discloses an endosurgical graft delivery assembly for introducing material into bone with delivery cannula 111 (Figs. 20-21; Col. 10, ll. 41-49, Col. 13, ll. 41-59). The '348 patent discloses a bone emplacement tool that inserts a bone plug into the bone hole. (Col. 6, ll. 56- 58; Col. 10, ll. 57-64; Col. 13, ll. 30-57) The '348 patent discloses insertion of the harvester 270 including bone plug 118 into a cannulated cylindrical endoscopic delivery guide (i.e. cannula) (Col. 10, l. 65- Col. 11, l. 9; Col. 13, ll. 40-49). The '196 patent discloses graft and recipient harvesters with collared pins for transplantation of graft into the bone. (Abstract; Col. 2, ll. 16-27)
a tamping instrument for advancement through the cannula including at least one marking to visually gauge the advancement of the terminus relative to the distal end of the cannula, and	At the time of the effective filing date of the '054 patent, the insertion of a tamping instrument into a hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent) in order to deliver material residing therein into bone would have been obvious to one of ordinary skill in the art. Further, at the time of the effective filing date of the '054 patent, the inclusion of markings on a hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent) and/or markings on a tamping instrument inserted into the hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent), in order to measure the advancement of one instrument in relation to the other, would have been obvious to one of ordinary skill in the art. At the time of the filing date of the '054 patent, it was common for medical instruments, such as syringes, to include markings to measure the advancement of one instrument in relation to another. The '631 patent discloses a plunger member 118 (i.e. tamping instrument) having a terminus portion 124 or

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	128 capable of advancement into the subcutaneous cannula, and which, during advancement, urges material residing in the subcutaneous cannula into the body (which includes bone); the portion 124 or 128 thereof follows the material out of the end of the endoscopic member and protrudes therefrom to maneuver the material. (Figs. 6 and 7; Col. 3, ll. 58-61; Col. 5, ll. 39-61) The '333 patent discloses a plunger member 118 (i.e. tamping instrument) having a terminus portion 124 or 128 capable of advancement into the subcutaneous cannula, and which, during advancement, urges material residing in the subcutaneous cannula into the body (which includes bone); the portion 124 or 128 thereof follows the material out of the end of the endoscopic member and protrudes therefrom to maneuver the material. (Figs. 6 and 7; Col. 3, ll. 55-58; Col. 5, ll. 34-56) The '263 patent discloses a syringe plunger member 10 capable of advancement into the syringe barrel member 20 and having a terminus 14 and plunger extension 54 which during advancement urges material residing in the syringe barrel member 20 into the extension nozzle member 44 or 56 into bone (Figs. 1-7; Col. 4, ll. 24-Col. 5, l.2; Col. 6, ll. 50-65) The '152 patent discloses a ram 10 having a terminus capable of advancing in the nozzle tube 7 to eject bone cement from the nozzle tube 7 into bone. (Figs. 3-5; Col. 1, ll. 54-56; Col. 1, l. 62-Col. 2, l. 2; Col. 3, ll. 25-33, 46-56) The '152 patent further discloses a ram 10 with spaced circular discs 16 for guiding the ram in the nozzle tube 7. (Figs. 3-5; Col. 4, ll. 14-16). These spaced circular discs can serve as markings to visually gauge the advancement of the ram. The '261 patent discloses a graft delivery piston 120 capable of advancement in the delivery cannula 111 and having a terminus which, during the advancement, urges graft material from the cannula into the fusion site. (Figs. 20-21; Col. 13, ll. 41-59) The '348 patent discloses plunger 292 with terminus

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	capable of advancement in the cannula to urge the bone plug into the bone hole, because the plunger has length sufficient to push bone plug 118 out of harvester cavity 280 and preferably 1-5 mm further. (Fig. 14; Col. 13, ll. 30-57) The '196 patent discloses a collared pin 26 with terminus capable of advancement in the hollow tube harvester 2 to urge the graft into the bone (Figs. 2, 5, 19; Col. 2, ll.16-23; Col. 3, ll. 19-30; Col. 5, ll. 24-38; Col. 8, ll. 20-27) The '196 patent discloses a harvester 2 with markings 12 for visual confirmation of depth during insertion (Fig. 1; Col. 2, ll. 33-42; Col. 4, ll. 55-50; Col. 5, ll. 14-18)
comprising a body portion and a handle portion, the body portion being sized and configured to substantially fill the cannula when the tamping instrument is fully inserted into the cannula.	The '631 patent discloses a plunger member 118 (i.e. tamping instrument) comprising a body portion 118 with circular portion 124 or frusto-conical shaped portion 128 at the proximal end thereof and a handle portion (e.g. grip portion 100). (Figs. 6-7; Col. 5, ll. 6-43) The '333 patent discloses a plunger member 118 (i.e. tamping instrument) comprising a body portion 118 with circular portion 124 or frusto-conical shaped portion 128 at the proximal end thereof and a handle portion (e.g. grip portion 100). (Figs. 6-7; Col. 5, ll. 1-38) The '263 patent discloses a syringe plunger member 10 comprising a piston rod 11 and handle 18, with the rod 11, when attached to plunger extension 54, sized and configured to substantially fill the barrel member 20 and extension nozzle member 44 or 56 when fully inserted therein. (Figs. 1-7; Col. 4, ll. 24-Col. 5, l.2; Col. 6, ll. 50-65) The '152 patent discloses a ram 10 with body portion 14 and handle 11. (Fig. 4; Col. 3, ll. 19-33) The '152 patent discloses a ram 10 capable of advancement into the nozzle bore (passageway of nozzle tube 7) to substantially fill the nozzle bore. (Figs. 3-5; Col. 1, ll. 54-56; Col. 1, l. 62-Col. 2, l. 2; Col. 3, ll. 25-29, 46-56)

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	The '261 patent discloses a graft delivery piston 120 with a body portion and knurled gripping portion 121, the body portion being sized and configured to substantially fill delivery cannula 111 when piston 120 is fully inserted in delivery cannula 111. (Figs. 20-21; Col. 10, ll. 41-49; Col. 13, ll. 41-59). The '348 patent discloses plunger 292 comprising shaft 294 and handle, with shaft 294 sized and configured to substantially fill the harvester 270 when fully inserted therein (Fig. 14; Col. 13, ll. 30-57) The '196 patent discloses a collared pin 26 comprising a collar 28 and handle 30, with collar 28 sized and configured to substantially fill the harvester 2 when fully inserted therein (Figs. 2, 5, 19; Col. 2, ll. 16-23; Col. 3, ll. 19-30; Col. 5, ll. 24-38; Col. 8, ll. 20-27)
42. Apparatus according to claim 41 wherein the at least one marking indicates when the distal end of the tamping instrument is aligned with the distal end of the cannula instrument.	*See* above at claim 41.
43. Apparatus according to claim 41 wherein the tamping instrument includes a set point marking spaced from the terminus at a distance generally equal to the length of the cannula.	*See* above at claim 41.
44. Apparatus according to claim 43 wherein the tamping instrument includes at least one additional marking to visually gauge advancement of the terminus relative to the distal end of the cannula.	*See* above at claim 43.
46. Apparatus for delivering	'631 patent discloses an endoscopic device that delivers

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
material into bone comprising a cannula for establishing a subcutaneous path into bone; and	a quantity of material to a remote location within the body (such as into bone). (Abstract; Col. 1, ll. 10-14; Col. 5, ll. 52-57) The '631 discloses the insertion of the endoscopic shaft 26 through a subcutaneous cannula. (Col. 3, ll. 58-61) '333 patent discloses an endoscopic device that delivers a quantity of material to a remote location within the body (such as into bone). (Abstract; Col. 1, ll. 6-10; Col. 5, ll. 47-52) The '333 discloses the insertion of the endoscopic shaft 26 through a subcutaneous cannula. (Col. 3, ll. 55-58) The '263 patent discloses an osseous implant syringe for introducing substances into interdental bone. (Abstract) The '263 patent discloses an extension nozzle member 44 (i.e. cannula) or curved extension nozzle member 56 (i.e. cannula) (Figs. 4-7; Col. 2, l. 66- Col 3, l.7; Col. 4, l. 47- Col. 5, l. 30; Col. 6, ll. 51-Col. 7, l. 11) The '152 patent discloses an injector for bone cement into a bone cavity. (Abstract; Col. 1, ll.4-7, 57-61; Col. 3, ll. 41-45; Col. 3, l. 64- Col. 4, l. 4) The '152 patent discloses a nozzle tube 7 that establishes a path into the bone cavity. (Figs. 1 and 3; Col. 1, l. 40-Col. 2, l. 2; Col. 3, ll. 46-51) The '261 patent discloses an endosurgical graft delivery assembly for introducing material into bone with delivery cannula 111 (Figs. 20-21; Col. 10, ll. 41-49, Col. 13, ll. 41-59). The '348 patent discloses a bone emplacement tool that inserts a bone plug into the bone hole. (Col. 6, ll. 56- 58; Col. 10, ll. 57-64; Col. 13, ll. 30-57) The '348 patent discloses insertion of the harvester 270 including bone plug 118 into a cannulated cylindrical endoscopic delivery guide (i.e. cannula) (Col. 10, l. 65- Col. 11, l. 9; Col. 13, ll. 40-49). The '196 patent discloses graft and recipient harvesters with collared pins for transplantation of graft into the bone. (Abstract; Col. 2, ll. 16-27)
a tamping instrument for	At the time of the effective filing date of the '054 patent,

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
advancement through the cannula including at least one marking to visually gauge the advancement of the terminus relative to the distal end of the cannula	the insertion of a tamping instrument into a hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent) in order to deliver material residing therein into bone would have been obvious to one of ordinary skill in the art. Further, at the time of the effective filing date of the '054 patent, the inclusion of markings on a hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent) and/or markings on a tamping instrument inserted into the hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent), in order to measure the advancement of one instrument in relation to the other, would have been obvious to one of ordinary skill in the art. At the time of the filing date of the '054 patent, it was common for medical instruments, such as syringes, to include markings to measure the advancement of one instrument in relation to another. The '631 patent discloses a plunger member 118 (i.e. tamping instrument) having a terminus portion 124 or 128 capable of advancement into the subcutaneous cannula, and which, during advancement, urges material residing in the subcutaneous cannula into the body (which includes bone); the portion 124 or 128 thereof follows the material out of the end of the endoscopic member and protrudes therefrom to maneuver the material. (Figs. 6 and 7; Col. 3, ll. 58-61; Col. 5, ll. 39-61) The '333 patent discloses a plunger member 118 (i.e. tamping instrument) having a terminus portion 124 or 128 capable of advancement into the subcutaneous cannula, and which, during advancement, urges material residing in the subcutaneous cannula into the body (which includes bone); the portion 124 or 128 thereof follows the material out of the end of the endoscopic member and protrudes therefrom to maneuver the material. (Figs. 6 and 7; Col. 3, ll. 55-58; Col. 5, ll. 34-56) The '263 patent discloses a syringe plunger member 10 capable of advancement into the syringe barrel member 20 and having a terminus 14 and plunger extension 54 which during advancement urges material residing in

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	the syringe barrel member 20 into the extension nozzle member 44 or 56 into bone (Figs. 1-7; Col. 4, ll. 24-Col. 5, l.2; Col. 6, ll. 50-65) The '152 patent discloses a ram 10 having a terminus capable of advancing in the nozzle tube 7 to eject bone cement from the nozzle tube 7 into bone. (Figs. 3-5; Col. 1, ll. 54-56; Col. 1, l. 62-Col. 2, l. 2; Col. 3, ll. 25-33, 46-56) The '152 patent further discloses a ram 10 with spaced circular discs 16 for guiding the ram in the nozzle tube 7. (Figs. 3-5; Col. 4, ll. 14-16). These spaced circular discs can serve as markings to visually gauge the advancement of the ram. The '261 patent discloses a graft delivery piston 120 capable of advancement in the delivery cannula 111 and having a terminus which, during the advancement, urges graft material from the cannula into the fusion site. (Figs. 20-21; Col. 13, ll. 41-59) The '348 patent discloses plunger 292 with terminus capable of advancement in the cannula to urge the bone plug into the bone hole, because the plunger has length sufficient to push bone plug 118 out of harvester cavity 280 and preferably 1-5 mm further. (Fig. 14; Col. 13, ll. 30-57) The '196 patent discloses a collared pin 26 with terminus capable of advancement in the hollow tube harvester 2 to urge the graft into the bone (Figs. 2, 5, 19; Col. 2, ll.16-23; Col. 3, ll. 19-30; Col. 5, ll. 24-38; Col. 8, ll. 20-27) The '196 patent discloses a harvester 2 with markings 12 for visual confirmation of depth during insertion (Fig. 1; Col. 2, ll. 33-42; Col. 4, ll. 55-50; Col. 5, ll. 14-18)
and comprising a body portion and a handle portion, the body portion having a substantially constant diameter along its length.	The '631 patent discloses a plunger member 118 (i.e. tamping instrument) comprising a body portion 118 with circular portion 124 or frusto-conical shaped portion 128 at the proximal end thereof and a handle portion (e.g. grip portion 100). (Figs. 6-7; Col. 5, ll. 6-43) The '333 patent discloses a plunger member 118 (i.e. tamping instrument) comprising a body portion 118

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	with circular portion 124 or frusto-conical shaped portion 128 at the proximal end thereof and a handle portion (e.g. grip portion 100). (Figs. 6-7; Col. 5, ll. 1-38) The '263 patent discloses a syringe plunger member 10 comprising a piston rod 11 and handle 18, with the rod 11 having a substantially constant diameter along its length (Fig. 1, Col. 3, ll. 57-64) The '152 patent discloses a ram 10 with a body portion 14 and handle 11, the body portion having a substantially constant diameter along its length. (Fig. 4; Col. 3, ll. 19-33) The '261 patent discloses a graft delivery piston 120 with a body portion and knurled gripping portion 121, the body portion having a substantially constant diameter along its length. (Figs. 20-21; Col. 10, ll. 41-49; Col. 13, ll. 41-59) The '348 patent discloses a plunger 292 comprising a shaft 294 and handle portion, the shaft having a substantially constant diameter along its length. (Fig. 14) The '196 patent discloses a collared pin 26 comprising a collar 28 and handle 30, with collar 28 having a substantially constant diameter along its length (Figs. 2, 5, 19; Col. 5, ll. 24-38;)
47. Apparatus according to claim 46 wherein the at least one marking indicates when the distal end of the tamping instrument is aligned with the distal end of the cannula instrument.	*See* above at claim 46.
48. Apparatus for delivering material into bone comprising a cannula for establishing a subcutaneous path into bone;	'631 patent discloses an endoscopic device that delivers a quantity of material to a remote location within the body (such as into bone). (Abstract; Col. 1, ll. 10-14; Col. 5, ll. 52-57) The '631 discloses the insertion of the

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
and	endoscopic shaft 26 through a subcutaneous cannula. (Col. 3, ll. 58-61) '333 patent discloses an endoscopic device that delivers a quantity of material to a remote location within the body (such as into bone). (Abstract; Col. 1, ll. 6-10; Col. 5, ll. 47-52) The '333 discloses the insertion of the endoscopic shaft 26 through a subcutaneous cannula. (Col. 3, ll. 55-58) The '263 patent discloses an osseous implant syringe for introducing substances into interdental bone. (Abstract) The '263 patent discloses an extension nozzle member 44 (i.e. cannula) or curved extension nozzle member 56 (i.e. cannula) (Figs. 4-7; Col. 2, l. 66- Col 3, l.7; Col. 4, l. 47- Col. 5, l. 30; Col. 6, ll. 51-Col. 7, l. 11) The '152 patent discloses an injector for bone cement into a bone cavity. (Abstract; Col. 1, ll.4-7, 57-61; Col. 3, ll. 41-45; Col. 3, l. 64- Col. 4, l. 4) The '152 patent discloses a nozzle tube 7 that establishes a path into the bone cavity. (Figs. 1 and 3; Col. 1, l. 40-Col. 2, l. 2; Col. 3, ll. 46-51) The '261 patent discloses an endosurgical graft delivery assembly for introducing material into bone with delivery cannula 111 (Figs. 20-21; Col. 10, ll. 41-49, Col. 13, ll. 41-59). The '348 patent discloses a bone emplacement tool that inserts a bone plug into the bone hole. (Col. 6, ll. 56- 58; Col. 10, ll. 57-64; Col. 13, ll. 30-57) The '348 patent discloses insertion of the harvester 270 including bone plug 118 into a cannulated cylindrical endoscopic delivery guide (i.e. cannula) (Col. 10, l. 65- Col. 11, l. 9; Col. 13, ll. 40-49). The '196 patent discloses graft and recipient harvesters with collared pins for transplantation of graft into the bone. (Abstract; Col. 2, ll. 16-27))
a tamping instrument for advancement through the cannula including a set point	At the time of the effective filing date of the '054 patent, the inclusion of markings on a hollow tube (such as the cannula or nozzle instrument disclosed in the '054

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
marking spaced from the terminus at a distance generally equal to the length of the cannula	patent) and/or markings on a tamping instrument inserted into the hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent), in order to measure the advancement of one instrument in relation to the other, would have been obvious to one of ordinary skill in the art. At the time of the filing date of the '054 patent, it was common for medical instruments, such as syringes, to include markings to measure the advancement of one instrument in relation to another. At the time of the effective filing date of the '054 patent, the insertion of a tamping instrument into a hollow tube (such as the cannula or nozzle instrument disclosed in the '054 patent) in order to deliver material residing therein into bone would have been obvious to one of ordinary skill in the art. The '631 patent discloses a plunger member 118 (i.e. tamping instrument) having a terminus portion 124 or 128 capable of advancement into the subcutaneous cannula, and which, during advancement, urges material residing in the subcutaneous cannula into the body (which includes bone); the portion 124 or 128 thereof follows the material out of the end of the endoscopic member and protrudes therefrom to maneuver the material. (Figs. 6 and 7; Col. 3, ll. 58-61; Col. 5, ll. 39-61) The '333 patent discloses a plunger member 118 (i.e. tamping instrument) having a terminus portion 124 or 128 capable of advancement into the subcutaneous cannula, and which, during advancement, urges material residing in the subcutaneous cannula into the body (which includes bone); the portion 124 or 128 thereof follows the material out of the end of the endoscopic member and protrudes therefrom to maneuver the material. (Figs. 6 and 7; Col. 3, ll. 55-58; Col. 5, ll. 34-56) The '263 patent discloses a syringe plunger member 10 capable of advancement into the syringe barrel member 20 and having a terminus 14 and plunger extension 54 which during advancement urges material residing in the syringe barrel member 20 into the extension nozzle

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	member 44 or 56 into bone (Figs. 1-7; Col. 4, ll. 24-Col. 5, l.2; Col. 6, ll. 50-65) The '152 patent discloses a ram 10 having a terminus capable of advancing in the nozzle tube 7 to eject bone cement from the nozzle tube 7 into bone. (Figs. 3-5; Col. 1, ll. 54-56; Col. 1, l. 62-Col. 2, l. 2; Col. 3, ll. 25-33, 46-56) The '152 patent further discloses a ram 10 with spaced circular discs 16 for guiding the ram in the nozzle tube 7. (Figs. 3-5; Col. 4, ll. 14-16). These spaced circular discs can serve as markings to visually gauge the advancement of the ram. The '261 patent discloses a graft delivery piston 120 capable of advancement in the delivery cannula 111 and having a terminus which, during the advancement, urges graft material from the cannula into the fusion site. (Figs. 20-21; Col. 13, ll. 41-59) The '348 patent discloses plunger 292 with terminus capable of advancement in the cannula to urge the bone plug into the bone hole, because the plunger has length sufficient to push bone plug 118 out of harvester cavity 280 and preferably 1-5 mm further. (Fig. 14; Col. 13, ll. 30-57) The '196 patent discloses a collared pin 26 with terminus capable of advancement in the hollow tube harvester 2 to urge the graft into the bone (Figs. 2, 5, 19; Col. 2, ll.16-23; Col. 3, ll. 19-30; Col. 5, ll. 24-38; Col. 8, ll. 20-27) The '196 patent discloses a harvester 2 with markings 12 for visual confirmation of depth during insertion (Fig. 1; Col. 2, ll. 33-42; Col. 4, ll. 55-50; Col. 5, ll. 14-18)
and comprising a body portion and a handle portion, the body portion having a substantially constant diameter along its length.	The '631 patent discloses a plunger member 118 (i.e. tamping instrument) comprising a body portion 118 with circular portion 124 or frusto-conical shaped portion 128 at the proximal end thereof and a handle portion (e.g. grip portion 100). (Figs. 6-7; Col. 5, ll. 6-43) The '333 patent discloses a plunger member 118 (i.e. tamping instrument) comprising a body portion 118 with circular portion 124 or frusto-conical shaped

Claim of the '054 Patent	Combination of '631, '333, '152, '263, '404, '261, '196, and/or '348 Patents
	portion 128 at the proximal end thereof and a handle portion (e.g. grip portion 100). (Figs. 6-7; Col. 5, ll. 1-38) The '263 patent discloses a syringe plunger member 10 comprising a piston rod 11 and handle 18, with the rod 11 having a substantially constant diameter along its length (Fig. 1; Col. 3, ll. 57-64) The '152 patent discloses a ram 10 with a body portion 14 and handle 11, the body portion having a substantially constant diameter along its length. (Fig. 4; Col. 3, ll. 19-33) The '348 patent discloses a plunger 292 comprising a shaft 294 and handle portion, the shaft having a substantially constant diameter along its length. (Fig. 14) The '196 patent discloses a collared pin 26 comprising a collar 28 and handle 30, with collar 28 having a substantially constant diameter along its length (Figs. 2, 5, 19; Col. 5, ll. 24-38)
49. Apparatus according to claim 48 wherein the tamping instrument includes at least one additional marking to visually gauge advancement of the terminus relative to the distal end of the cannula.	*See* above at claim 48.