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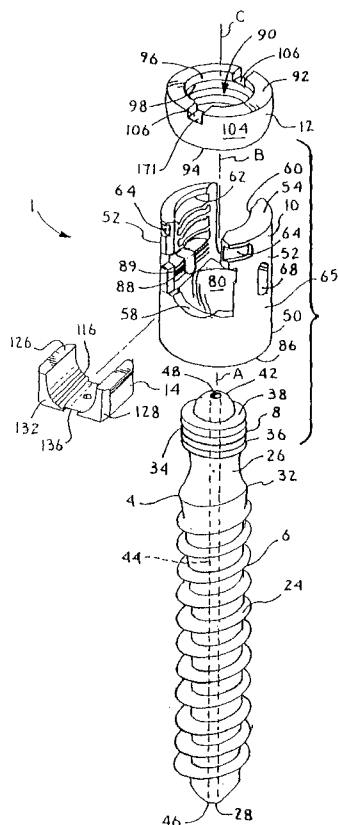
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(54) Title: POLYAXIAL BONE SCREW WITH SHANK ARTICULATION PRESSURE INSERT AND METHOD



(57) Abstract: A polyaxial bone screw assembly includes a threaded shank body having an upper portion, a receiver member or head, a retaining and articulating structure, and a pressure insert disposed between the shank upper portion and a rod. The receiver has a U-shaped cradle defining a channel for receiving a spinal fixation rod. The channel communicates with a receiver cavity and further with a restrictive opening that allows for loading the shank upper portion into the receiver but prevents passage of the retaining and articulating structure out of the receiver. In a ratcheted embodiment, the insert may be used to independently lock the angle of orientation between the shank and the receiver.

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INTERNATIONAL SEARCH REPORT

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<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(8): A61F 2/30 (2007.01) USPC: 606/61 According to International Patent Classification (IPC) or to both national classification and IPC</p>											
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) USPC - 606/61</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST(PGPB,USPT,EPAB,JPAB); Google Patents; Search Terms Used: polyaxial, insert, shank, screw, angle, ratchet\$, teeth, pressure</p>											
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:10%;">Category*</th> <th style="width:70%;">Citation of document, with indication, where appropriate, of the relevant passages</th> <th style="width:20%;">Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X ----- Y</td> <td>US 2005/0049589 A1 (JACKSON) 03 March 2005 (03.03.2005), Entire document Especially FIGS. 1-3, 6, 9, 18; para[0040]-[0065].</td> <td>17 ----- 1-16, 18, 21</td> </tr> <tr> <td>X ----- Y</td> <td>US 2004/0225289 A1 (BIEDERMANN et al.) 11 November 2004 (11.11.2004), Entire document Especially (Figs. 10a-10c and para[0073]).</td> <td>19-20 ----- 1-16, 18, 21</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X ----- Y	US 2005/0049589 A1 (JACKSON) 03 March 2005 (03.03.2005), Entire document Especially FIGS. 1-3, 6, 9, 18; para[0040]-[0065].	17 ----- 1-16, 18, 21	X ----- Y	US 2004/0225289 A1 (BIEDERMANN et al.) 11 November 2004 (11.11.2004), Entire document Especially (Figs. 10a-10c and para[0073]).	19-20 ----- 1-16, 18, 21
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<p>Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201</p>		<p>Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774</p>									