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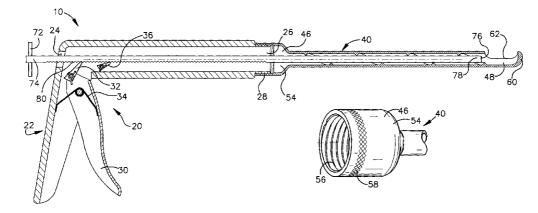
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(54) Title: APPARATUS FOR DEPOSITING BONE GRAFTING MATERIAL



(57) Abstract: An apparatus (10) for depositing bone graft material into a mammalian body comprises a barrel member (40) having an inner surface with internal threads. The barrel (40) includes an exit port (62) through which bone graft material placed into the barrel (40) exits the barrel (40). A plunger member (70) is disposed coaxially within the barrel member (40) for pushing the bone graft material toward the exit port (62) in the barrel (40). A mechanism is provided for advancing the plunger member (70) within the barrel member (40). The plunger member (70) can be rotatable and include external threads (28) that are complimentary to and engaged with the internal threads (56) in the barrel member (40) to assist in moving the bone graft material toward the exit port (62) in the barrel (40).





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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61F2/46 A61E A61B17/88 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) A61F A61B IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X PATENT ABSTRACTS OF JAPAN 1-3,6-9vol. 1996, no. 04, 12-15 30 April 1996 (1996-04-30) -& JP 07 313586 A (MITSUBISHI MATERIALS CORP), 5 December 1995 (1995-12-05) abstract Y paragraphs '0019! - '0021!; figure 3 4,5,10, Α DE 201 18 100 U (HAINDL HANS) 1-3,6-99 January 2003 (2003-01-09) 12-15 page 2, paragraph 4 - page 3, paragraph 2 Υ claims 1,3; figure 4,5,10, 11 US 2003/036762 A1 (FULMER MARK T ET AL) 1 - 1520 February 2003 (2003-02-20) claims; figures 1-5 -/--Further documents are listed in the continuation of box C. Patent family members are listed in annex. ° Special categories of cited documents: "T" later document published after the international filing date "A" document defining the general state of the art which is not or priority date and not in conflict with the application but cited to understand the principle or theory underlying the considered to be of particular relevance invention earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 20 October 2004 26/10/2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016 Kuehne, H-C

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