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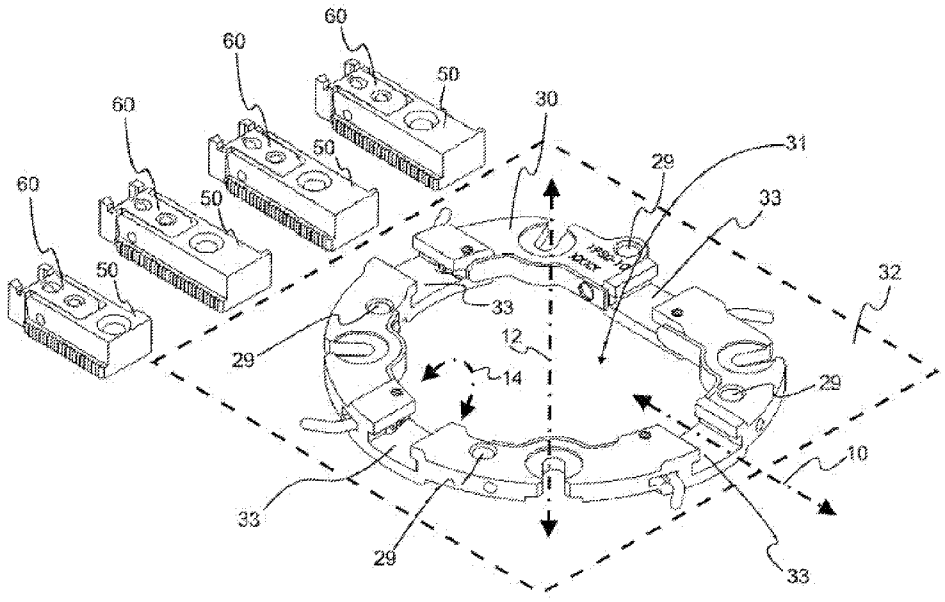
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(54) Title: SURGICAL RETRACTOR AND RETRACTOR ASSEMBLY



(57) Abstract: Retractor for insertion in an incision of a patient includes a frame defining a central opening and a reference plane, and at least one blade disposed within the central opening. The blade operatively coupled to the frame by a support structure for movement in a first direction generally laterally with the reference plane between an unretracted position and a retracted position, a second direction at an angle extending through and relative to the reference plane for adjustment of the blade depth, and a third direction rotationally relative to the reference plane. Additionally, the frame includes a track in mating relationship with the support structure for sliding movement therebetween in a defined relationship relative to the reference plane. Retractor assembly includes the retractor as previously described, in combination with an adjustment tool or an insertion tool.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 07/63529

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - A61B 1/32 (2007.10)
USPC - 600/201
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)
IPC8 : A61B 1/32 (2007.10)
USPC : 600/201

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC8 : A61B 17/00, A61B 17/02 (2007.10)
USPC : 600/226, 600/227, 600/215, 600/224, 600/219, 600/216, 600/233

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST (PGPB,USPT,EPAB,JPAB), Google Scholar
Search terms : adjust, fixate, track, dovetail, access port, scissor, pivot, adjust, multiaxis, lock, teeth, tooth, worm, gear, pinion, rack, ratchet, slide, sliding, translate, lateral, rotate, hinge, spinal, spine, vertebral, retract, distract, tractor

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2004/0087833 A1 (BAUER et al) 6 May 2004 (06.05.2004) see especially para [0029]-[0031] and figs 6 and 7	1-67
Y	US 4,616,635 A (CASPAR et al) 14 October 1984 (14.10.1984) see especially col 3, ln 53 to col 4, ln 47, figs 4,5 and 7	1-56, 61-64
Y	US 2002/0026101 A1 (BOOKWALTER et al) 28 February 2002 (28.02.2002) see especially para [0024] and [0025]	1-56, 60, 65-67
Y	US 2003/0191371 A1 (SMITH et al) 9 October 2003 (09.10.2003) see especially para [0044]-[0046] and figs 11 and 12	15-24, 35-44, 54-56
Y	US 2005/0159650 A1 (RAYMOND et al) 21 July 2005 (21.07.2005) see especially para [0125], [0126], [0129], [0133], [0135], [0138], [0139], figs 23, 24 and 25	25-34, 45-56
Y	US 2004/0230191 A1 (FREY et al) 18 November 2004 (18.11.2004) see especially fig 3	12, 57-67

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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