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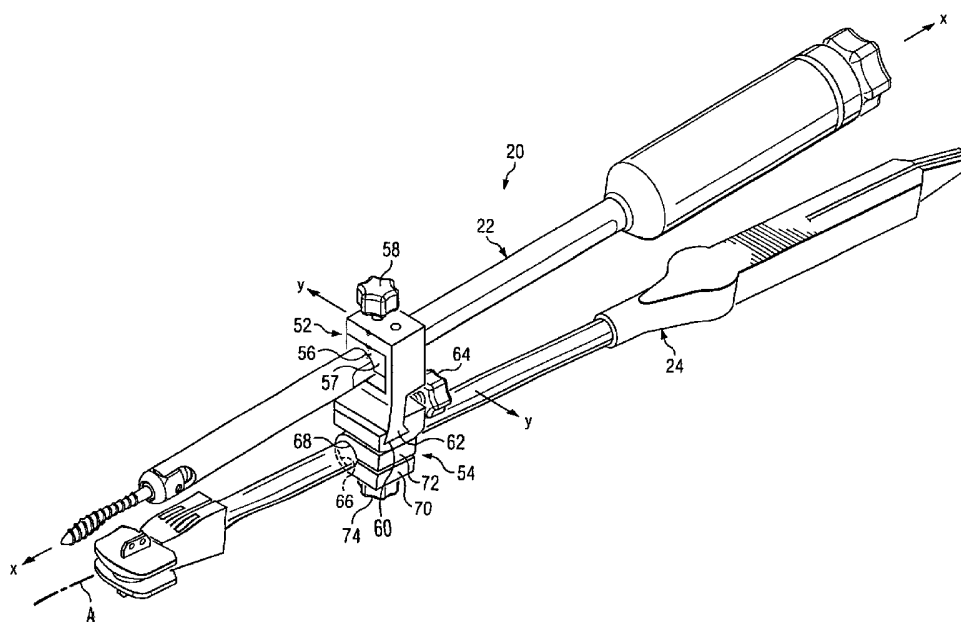
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(54) Title: INSTRUMENTS AND METHODS FOR ALIGNING IMPLANTS FOR INSERTION



(57) Abstract: An assembly (20) for aligning a prosthetic device for insertion into an intervertebral space (5) is provided. The assembly includes an alignment instrument (22), a first clamp assembly (52) slidably engaged with the alignment instrument, a second clamp assembly (54) slidably engaged with the first clamp assembly, and an implantation device (24) slidably engaged with the second clamp assembly, the implantation device being adapted to retain a prosthetic device thereon.

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GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

Application No
PCT/US2004/004534

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61F2/46 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)
IPC 7 A61F A61B

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2001/021853 A1 (HECKELE HELMUT ET AL) 13 September 2001 (2001-09-13) paragraph [0019] - paragraph [0023] -----	1,2,4,7, 8
X	US 5 484 440 A (ALLARD RANDALL N) 16 January 1996 (1996-01-16) column 1, line 63 - column 3, line 18 column 4, line 10 - line 34 -----	1-3,8
X	US 5 649 931 A (BRYANT MARK A ET AL) 22 July 1997 (1997-07-22) column 2, line 39 - column 3, line 44 -----	1-3,9
X	WO 98/17208 A (SURGICAL DYNAMICS INC) 30 April 1998 (1998-04-30) page 20, line 8 - page 21, line 26 page 27, line 15 - line 24 -----	1,3,9,11

Further documents are listed in the continuation of box C. Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier document but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"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)	"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 documents, such combination being obvious to a person skilled in the art.
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 19 July 2004	Date of mailing of the international search report 06. 10. 2004
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Name and mailing address of the ISA 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	Authorized officer Buchmann, G
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2004/004534

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: 20-29
because they relate to subject matter not required to be searched by this Authority, namely:
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-11

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Claims Nos.: 20-29

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-11

An instrument comprising an annular housing, a plunger member disposed therein, and an anchoring device partially disposed in the housing and adapted to be driven by the plunger member.
An implantation device combined with said instrument.

2. claims: 12-19

An alignment instrument, slidably connected to an implantation device by two clamp assemblies.

INTERNATIONAL SEARCH REPORT
Information on patent family members

Application No
PCT/US2004/004534

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 2001021853	A1	13-09-2001	DE 10011678 A1	27-09-2001
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