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DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD,
SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR,
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[Continued on next page]

(54) Title: ARTICULATING CRANIAL BOLT

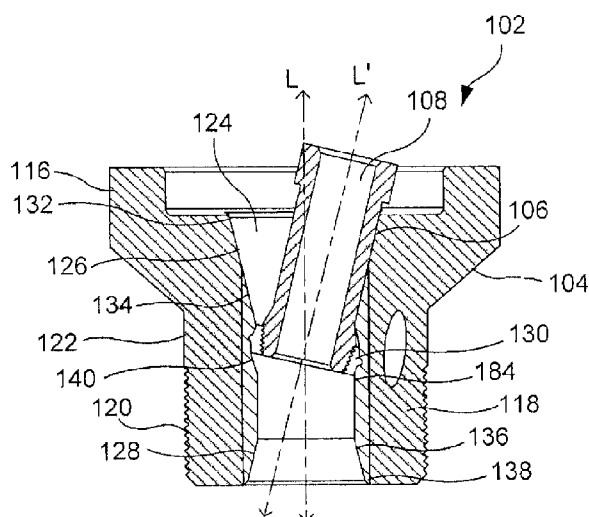


FIG. 5

(57) Abstract: A catheter guiding device includes a bolt including a shaft configured to be inserted within a hole drilled in a bone and a passageway extending longitudinally therethrough along a bolt axis and a guide member received within the passageway of the bolt and extending longitudinally along a guide axis. The guide member includes a guide channel extending therethrough along the guide axis, wherein, in a first configuration, the guide member is arrangeable to a desired position relative to the bolt to align the guide axis with a target area and, in a second configuration, the guide member is fixed in the desired position relative to the bolt such that the guide axis is at a desired angle relative to the bolt axis within a permitted range of angulations.



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INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER

INV. A61B19/00

ADD.

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)

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 practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/040753 A1 (DAUM WOLFGANG [DE] ET AL) 27 February 2003 (2003-02-27) the whole document	1-28, 37-39
X	WO 98/17191 A1 (MAGNETIC VISION GMBH [CH]; BERNAYS RENE [CH]; VIGANO ADRIANO [CH]) 30 April 1998 (1998-04-30) figures	1,3,4, 25,37
X	WO 01/78814 A1 (U HOI S [US]; AMIS JAMES PETER [US]) 25 October 2001 (2001-10-25) figures	1,25, 37-39
X	WO 2009/149398 A2 (FLINT ALEXANDER CALHOUN [US]) 10 December 2009 (2009-12-10) figures	1-5,25, 37-39
	----- -/-	



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"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

"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

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Date of the actual completion of the international search

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Name and mailing address of the ISA/

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International application No

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 809 694 A (FERRARA VINCENT L [US]) 7 March 1989 (1989-03-07) figures -----	1-5,25, 37-39
X	GB 2 469 083 A (SURGICAL INNOVATIONS LTD [GB]) 6 October 2010 (2010-10-06) figures -----	1,12
X	US 2004/167543 A1 (MAZZOCCHI RUDY A [US] ET AL) 26 August 2004 (2004-08-26) figures -----	1,12

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2012/029944

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/029944

Box No. 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.: 29-36
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 No. 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 fees, this Authority did not invite payment of additional fees.
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.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☒ No protest accompanied the payment of additional search fees.

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, 15-28, 37-39

A catheter guiding device, the essential features related to adjustment and fixation of the guide member. The problem solved is an effective and accurate locking mechanism.

2. claims: 12-14

A catheter guiding device comprising a plurality of probe channels. The problem solved is to introduce a plurality of devices.
