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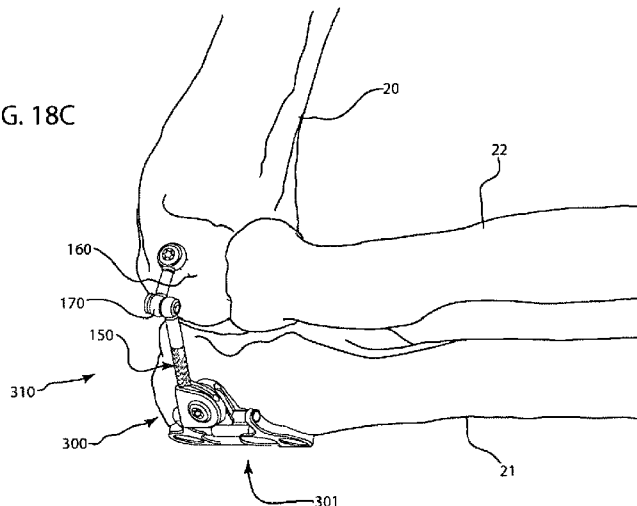
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[Continued on next page]

(54) Title: INTERNAL JOINT STABILIZER DEVICE, SYSTEM, AND METHOD OF USE

FIG. 18C



(57) Abstract: A stabilization device is provided including an axle and a portion that can be affixed to a bone. The device is used to stabilize a joint while allowing motion of the joint along its natural trajectory and it is placed internally in order to prevent pin tract problems. Additionally, methods for using the device are provided that include, in various sequences, inserting the axle into a bone of a joint, adjusting the geometry of the device and attaching the fixable portion to another bone of the joint. The device can be provided as part of a system including an axis trajectory guide useful for locating the axis of rotation of the joint prior to insertion, adjustment and attachment of the device.

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MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM,
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— *if the expiration of the time limit for amending the
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— *with international search report (Art. 21(3))*

(88) Date of Publication of the international search report:

14 May 2010

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER		
A61B 17/68(2006.01)i, A61B 17/86(2006.01)i, A61B 17/88(2006.01)i, A61B 17/90(2006.01)i		
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 17/68, A61B 17/56, A61B 17/72, A61F 1/03, A61F 5/00		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models Japanese utility models and applications for utility models (Chinese Patents and application for patent)		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords joint stabilizer, bone screws, axle, elbowjoint		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	US 6217582 B1 (SLI)CUM ₁ D BARCLAY) 17 April 2001 See Fig. 7; Col .2 Line 32-Col .3 Line 34	1-29 ,43-52
A	LIS 6162223 A1 (ORSAK, JAMES E. et al) 19 December 2000 See Figs . 1-16 , Col .4 Lines 29-67	1-29 ,43-52
A	LIS 6520961 B1 (MARSH, J LAWRENCE) 18 February 2003 See Figs . 1a-1b ; Col 3 Line 50-Col .4 Line 30	1-29 ,43-52
A	[US 5571103 A1 (BAILEY KIRK J) 05 November 1996 See Figs . 1-2 , Col .2 Line 24-Col .3 Line 12	1-29 ,43-52
A	LIS 4242758 A1 (AMIS; ANDREW A et al) 06 January 1981 See Col 1 Line 4- Col 5 line 27	1-29 ,43-52
<input type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> 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 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified) "O" document referring to an oral disclosure use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "X" 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 "Y" 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 "Z" 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 "Si" document member of the same patent family		
Date of the actual completion of the international search 23 MARCH 2010 (23 03 2010)		Date of mailing of the international search report 24 MARCH 2010 (24.03.2010)
Name and mailing address of the ISA/KR  Korean Intellectual Property Office Government Complex-Daejeon, 139 Seonsa-ro, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No 82-42-472-7140		Authorized officer OH Seung Jae Telephone No 82-42-481-8469 

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2009/052584

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 30-42 and 53-56
because they relate to subject matter not required to be searched by this Authority, namely
Claim 30-42 and 53-56 relate to methods for fixing a joint, which are surgical methods to treat human body. These methods fall into the category of a method for treatment of the human body by surgery, therapy or diagnostic methods [Article 17(2)(XaXi), Rule 39 I(iv) PCT]
- 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

- 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

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

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No
PCTYUS2009/052584

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6217582 B1	17 04 2001	US 2001-0049525 A1 US 6464705 B2 WO 98-36698A1	06.12.2001 15.10.2002 27.08.1998
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US 5571103 A1	05 11 1996	None	
US 4242758 A1	06 01 1981	None	