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- (81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, 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, PA, 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, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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**Declarations under Rule 4.17:**

- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

**Published:**

- with international search report (Art. 21(3))
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9 October 2014

(54) **Title:** ROTARY SUPPORT JOINT ASSEMBLIES FOR COUPLING A FIRST PORTION OF A SURGICAL INSTRUMENT TO A SECOND PORTION OF A SURGICAL INSTRUMENT

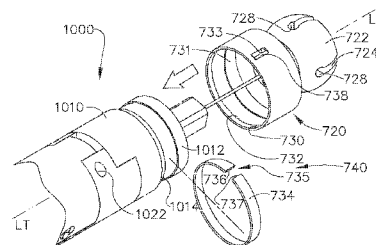


FIG. 26

(57) **Abstract:** A rotary support joint assembly for coupling a first portion of a surgical instrument to a second portion of a surgical instrument. In various forms the joint assembly includes a first annular race in the first portion and a second annular race in the second portion. The second race is configured for substantial registration with the first annular race when the second portion is joined with the first portion. A ring-like bearing is supported within the registered first and second annular races.

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INTERNATIONAL SEARCH REPORT

International application No  
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A. CLASSIFICATION OF SUBJECT MATTER  
INV. A61B17/072  
ADD. A61B17/29

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 5 312 023 A (GREEN DAVID T [US] ET AL) 17 May 1994 (1994-05-17)	1,6,9-11
Y	column 26, line 28 - column 27, line 18 figures 54, 60, 63, 64	2-5,7,8
X	US 2011/184459 A1 (MALKOWSKI JAROSLAW T [US] ET AL) 28 July 2011 (2011-07-28)	12-19
Y	paragraphs [0164], [0171], [0172] figures 8, 11A, 11D, 13-15, 23	2-5,7,8
A	US 2010/298636 A1 (CASTRO SALVATORE [US] ET AL) 25 November 2010 (2010-11-25) paragraph [0021] figures 1-3, 7, 8	1,6,7

Further documents are listed in the continuation of Box C.

See patent family annex.

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- "&" document member of the same patent family

Date of the actual completion of the international search  21 July 2014	Date of mailing of the international search report  29/07/2014
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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, Fax: (+31-70) 340-3016	Authorized officer  Chabus, Hervé
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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