

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
5 April 2007 (05.04.2007)

PCT

(10) International Publication Number
WO 2007/036815 A3

- (51) International Patent Classification:
A61B 17/34 (2006.01)
- (21) International Application Number:
PCT/IB2006/053014
- (22) International Filing Date: 30 August 2006 (30.08.2006)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:

60/721,094	28 September 2005 (28.09.2005)	US
60/763,003	26 January 2006 (26.01.2006)	US
60/762,789	26 January 2006 (26.01.2006)	US
11/360,251	22 February 2006 (22.02.2006)	US

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, NA, 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, IS, IT, LT, LU, LV, MC, NL, PL, 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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Declaration under Rule 4.17:
— of inventorship (Rule 4.17(iv))

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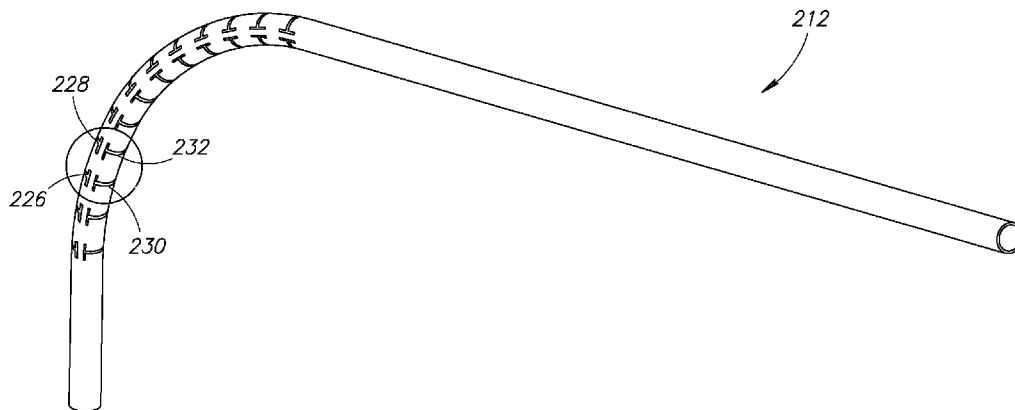
Published:
— with international search report

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(88) Date of publication of the international search report:
13 September 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CANNULA FOR INJECTING MATERIAL INTO BONE



(57) Abstract: A bone cement cannula, the cannula comprising: a tube (212) including a section (224) for plastic deformation; and a lumen in the tube capable of resisting forces of a viscous material propelled therethrough at a pressure of at least 100 atmospheres. Alternatively a bone cement cannula (1002) with at least two inlet ports (730), (740) for a plurality of materials or entry of a stylet.

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INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2006/053014

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61B17/34

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 A61F

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 2004/260303 A1 (CARRISON H.F.) 23 December 2004 (2004-12-23) cited in the application	1, 10, 12, 13
Y	paragraphs [0002] - [0004], [0006], [0008], [0009], [0024], [0028], [0039], [0040]; figure 1	2-9, 11, 19
X	WO 2005/051212 A (SOMATEX MEDICAL TECHNOLOGIES) 9 June 2005 (2005-06-09)	1, 10, 12, 13
A	page 10, line 23 - line 28; claim 3; figure 1	2-9, 11, 19
X	EP 1 464 292 A (DEPUY SPINE) 6 October 2004 (2004-10-06)	1, 10, 12, 13
A	paragraph [0034]	2-9, 11, 19
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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 document 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 another 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

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

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.

* & * document member of the same patent family

Date of the actual completion of the international search

20 March 2007

Date of mailing of the international search report

05/06/2007

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INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2006/053014

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	DE 41 04 092 A (RIEGER C.) 14 August 1991 (1991-08-14) abstract; figures -----	2-4,6,8, 9,11,19 7
Y A	WO 96/19940 A (OMRIX BIOPHARMACEUTICALS) 4 July 1996 (1996-07-04) page 8, line 10 - page 9, line 24; figures 3-6 -----	5,7 2,6
A	WO 2004/075965 A (SCIMED LIFE SYSTEMS) 10 September 2004 (2004-09-10) claim 5; figures 1,2,8-15,17,18 -----	2-4,6,19
A	US 2004/054377 A1 (FOSTER T.L. & ROEMER F.D.) 18 March 2004 (2004-03-18) cited in the application -----	
A	US 5 514 137 A (COUTTS R.D.) 7 May 1996 (1996-05-07) column 17, line 18 - line 57; figures 11,12 -----	
A	US 2004/059283 A1 (KIRWAN J.M.) 25 March 2004 (2004-03-25) paragraphs [0035], [0060]; figure 10 -----	
A	EP 0 669 100 A (IMMUNO) 30 August 1995 (1995-08-30) column 5, line 3 - line 19 -----	
A	WO 00/06216 A (KIRWAN J.M. ET AL.) 10 February 2000 (2000-02-10) abstract -----	

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2006/053014

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.: 20-21
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.:

see annex

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

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

1. claims: 1-13,19

Deformable cannula, with a series of joints or a sleeve or sealing layer

2. claims: 14-18

Cannula with multiple inlet ports

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2006/053014

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