

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
17 April 2008 (17.04.2008)

PCT

(10) International Publication Number
WO 2008/045724 A3

- (51) International Patent Classification:
A61B 17/70 (2006.01) A61B 17/80 (2006.01)
- (21) International Application Number:
PCT/US2007/080162
- (22) International Filing Date: 2 October 2007 (02.10.2007)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
11/544,839 6 October 2006 (06.10.2006) US
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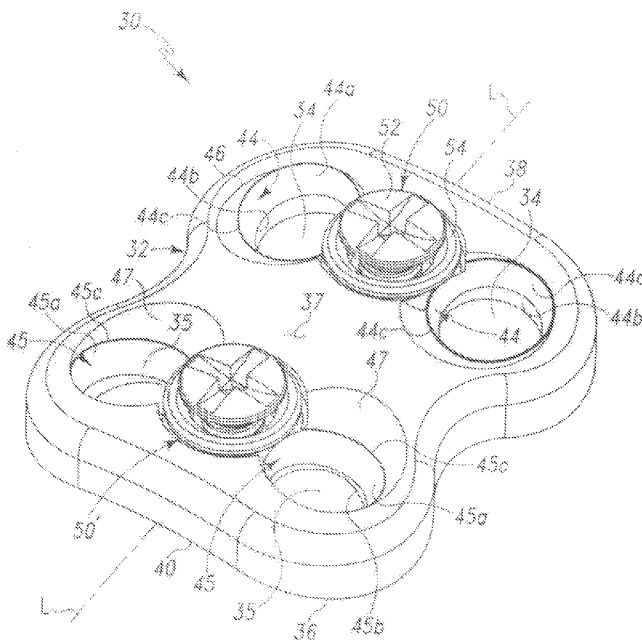
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, 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, 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.

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- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, 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, MT, 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).

[Continued on next page]

(54) Title: PORT STRUCTURES FOR NON-RIGID BONE PLATES



(57) Abstract: There is provided an orthopedic plate and port structures for the plate. The plate (16, 30, 130, 230, 330, 430) can be non-rigid and includes at least one hole (34, 35, 434, 435, 436) for receiving an anchor (18) or an anchor retaining device (20, 50, 50', 450). The at least one hole (34, 35, 434, 435, 436) can include a rigid port structure (44, 45, 132, 133, 232, 233, 332, 333, 410) that prevents or resists deformation of the plate (16, 30, 130, 230, 330, 430) when the anchor (18) or anchor retaining device (20, 50, 50', 450) is engaged thereto.

WO 2008/045724 A3



Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
17 July 2008

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/080162

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61B17/70 A61B17/80

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 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 2004/215195 A1 (SHIPP KENNETH [US] ET AL) 28 October 2004 (2004-10-28) cited in the application page 1, paragraph 8-13 page 2, paragraph 26-29 page 3, paragraph 34 page 4, paragraph 39 - page 5, paragraph 49 figures 3a-4, 6a-6c	1-4, 16-29
X	US 6 152 927 A (FARRIS ROBERT A [US] ET AL) 28 November 2000 (2000-11-28) cited in the application column 2, lines 28-67 column 5, line 45 - column 12, line 54 figures 6, 11-18	1, 4, 16-20, 28, 29
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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

15 February 2008

Date of mailing of the international search report

29/05/2008

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INTERNATIONAL SEARCH REPORT

 International application No
 PCT/US2007/080162

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 5 578 034 A (ESTES BRADLEY T [US]) 26 November 1996 (1996-11-26) column 1, lines 32-40 column 5, line 54 - column 8, line 67 figures 1,6,7	1,4,5
A	-----	6-8,16
X	US 5 057 111 A (PARK JOON B [US]) 15 October 1991 (1991-10-15) column 5, line 61 - column 8, line 52 figures 2,5	1,4
A	-----	2,16
X	EP 1 306 057 A (BIEDERMANN MOTECH GMBH [DE]) 2 May 2003 (2003-05-02) column 3, paragraph 11 - column 4, paragraph 13 figures 1,4	1,4-8
X	FR 2 744 011 A (ROSSIN RICHARD [FR]) 1 August 1997 (1997-08-01) page 2, lines 6-24 page 3, line 13 - page 6, line 28 figure 25	1,4

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2007/080162

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.:
because they relate to subject matter not required to be searched by this Authority, namely:

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 allsearchable 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.:

see annex

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: 1-8, 16-29

A plating system for stabilizing a spinal column segment, comprising:
a plate body extending between a first end and an opposite second end along a longitudinal axis, said plate body including a distal surface positionable adjacent the spinal column segment and an opposite proximal surface, said plate body further including at least one hole extending between said distal and proximal surfaces; and a port structure positioned about at least a portion of said at least one hole, said port structure including a distal portion adjacent said distal surface of said plate body and a proximal portion adjacent said proximal surface of said plate body, said distal portion including an inner surface defining a cylindrically shaped portion of said at least one hole and said proximal portion including an inner surface defining a concave recessed portion of said at least one hole for receiving a head of an anchor therein.

2. claims: 9-15, 30-34

A plating system for stabilizing a spinal column segment, comprising:
a plate body extending between a first end and an opposite second end along a longitudinal axis, said plate body including a distal surface positionable adjacent the spinal column segment and an opposite proximal surface, said plate body further including at least one hole extending between said distal and proximal surfaces; and a port structure positioned about at least a portion of said at least one hole, said port structure including a distal portion adjacent said distal surface of said plate body and a receptacle extending proximally from said distal portion to a flange adjacent said proximal surface of said plate body, wherein said flange is deformed from a first position extending proximally from said receptacle to a second position extending radially outwardly from said receptacle into engagement with said plate body.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/080162

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