

(43) International Publication Date
16 July 2009 (16.07.2009)(10) International Publication Number
WO 2009/089395 A3

(51) International Patent Classification:

A61B 17/72 (2006.01) A61B 17/58 (2006.01)
A61B 17/62 (2006.01)

(21) International Application Number:

PCT/US2009/030502

(22) International Filing Date:

8 January 2009 (08.01.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/019,622	8 January 2008 (08.01.2008)	US
61/098,456	19 September 2008 (19.09.2008)	US
61/104,862	13 October 2008 (13.10.2008)	US
61/122,506	15 December 2008 (15.12.2008)	US
61/138,031	16 December 2008 (16.12.2008)	US

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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, 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, ST, 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, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:
15 October 2009

(54) Title: OSTEOINTEGRATION APPARATUS

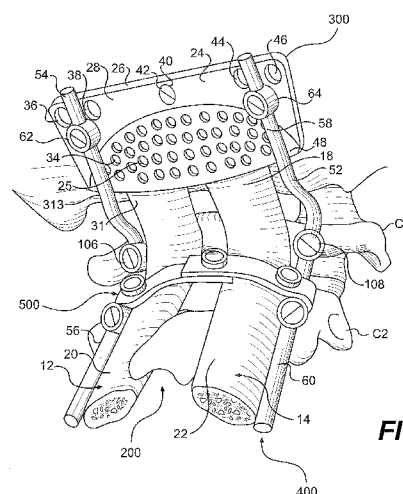


FIG. 3

(57) Abstract: A method for effecting reduction, stabilization and enhancement of fusion of the human crano-cervical junction, which may be performed in order to relieve mechanical stresses imparted to the spinal cord and brainstem as a result of an abnormal clivo-axial angle, includes steps of achieving the correct craniocervical relationship, of effecting a fusion of a first portion of a bone forming material based structural member to a human cranium, and effecting fusion of a second portion of the bone forming material based structural member to a least one portion of a human cervical spine. Fusion of the bone forming material based structural member to the human cranium may be promoted through the use an osteointegration apparatus that includes a porous ossomeric mesh and a frame member.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/030502**A. CLASSIFICATION OF SUBJECT MATTER***A61B 17/72(2006.01)i, A61B 17/62(2006.01)i, A61B 17/58(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)

IPC 8: A61B

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 since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO Internal) "mesh", "bone", "connector", "fusion", "surgical", "fasten", "adjustable", "graft", "fiber"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006-0264948 A1 (LYTTON A. WILLIAMS) 23 November 2006 See claims 1 and 7, 27-35, paragraphs [0031]-[0033], figures 1-6	12-21
A	US 2007-0118121 A1 (THOMAS PURCELL et al.) 24 May 2007 See claims 1, 16 and 17, paragraphs [0065]-[0066], figures 1 and 10	12-21
A	US 2006-0004363 A1 (DOUGLAS L. BROCKMEYER et al.) 5 January 2006 See claim 7, paragraph [0012], figure 9	12-21
A	US 2006-0217710 A1 (M. SAMY ABDOU) 28 September 2006 See claim 1, paragraph [0151], abstract, figure 52	12-21

☐ 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

"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

"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

29 JULY 2009 (29.07.2009)

Date of mailing of the international search report

30 JULY 2009 (30.07.2009)

Name and mailing address of the ISA/KR

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2009/030502**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.: 1-11
because they relate to subject matter not required to be searched by this Authority, namely:
Claims 1-11 pertain to methods for treatment of human or animal body by surgery and thus relate to a subject matter which this International Searching Authority is not required to search under Article 17(2)(a)(i) and Rule 39.1(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.

PCT/US2009/030502Patent document
cited in search reportPublication
datePatent family
member(s)Publication
date

US 2006-0264948 A1

23.11.2006

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