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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.
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Declarations under Rule 4.17:

- 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))
- of inventorship (Rule 4.17(iv))

[Continued on next page]

(54) **Title:** FACET FUSION IMPLANT

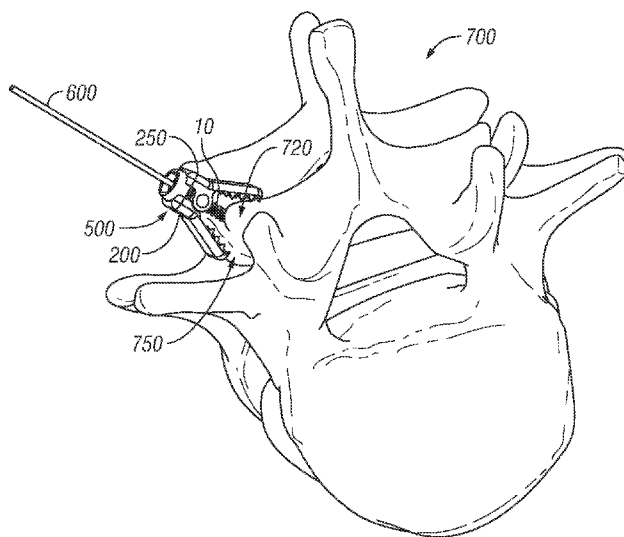


FIG. 7B

(57) **Abstract:** A medical device, method and system are provided for stabilizing and/or for fusing bone material, such as vertebra of the spine. The medical device (fusion device) has a pair of clamp members and an optional anchor member that cooperate to securely attach the fusion device to a facet joint of the spine. The fusion device may slide down a guide wire and driven into facet bone material of a facet joint. The clamp members may be pivoted together to grip adjacent bone facets and promote their fusion. Further features include injecting flowable bone fusion material between adjacent bone facets gripped by the device.

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A. CLASSIFICATION OF SUBJECT MATTER*A61F 2/44(2006.01)i, A61B 17/70(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 A61F 2/44, A61B 17/70

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)

eKIPASS, PAJ, USPTO, WIP

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| A | US 2006/0052785 A1 (Teena M. Augustino et al.) 9 March 2006 - See the whole document | 1-6, 8&9 |
| A | US 2006/0004367 A1 (Todd F. Alamin) 5 January 2006 - See the whole document | 1-6, 8&9 |
| A | US 7074238 B2 (David Stinson et al) 11 July 2006 - See the whole document | 1-6, 8&9 |
| A | US 6132464 A (Jean-Raymond Martin) 17 October 2000 - See the whole document | 1-6, 8&9 |
| A | US 5584831 A (Douglas W. Mckay) 17 December 1996 - See the whole document | 1-6, 8&9 |
| A | US 6942698 B1 (Roger P. Jackson) 13 September 2005 - See the whole document | 1-6, 8&9 |

 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

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|--|------------------|---|--|
| US 2006/0052785 A1 | 09.03.2006 | None | |
| US 2006/004367 A1 | 05.01.2006 | None | |
| US 7074238 B2 | 11.07.2006 | AU 2004-258829 A1 CA 2531593 A1 EP 1648353 A1 US 2005-0010291 A1 US 2005-010291 A1 US 2006-100707 A1 US 2006-265070 A1 WO 2005-009301 A1 | 03.02.2005 03.02.2005 26.04.2006 13.01.2005 13.01.2005 11.05.2006 23.11.2006 03.02.2005 |
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| US 5584831 A | 17.12.1996 | AU 7220494 A US 5984922 US 6468276 US 5984922 A US 6468276 B1 WO 95-02372 A2 | 13.02.1995 16.11.1999 22.10.2002 16.11.1999 22.10.2002 26.01.1995 |
| US 6942698 B1 | 13.09.2005 | None | |

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.: 7
because they relate to subject matter not required to be searched by this Authority, namely:
Claim 7 pertains to method for treatment of the human or animal body, and thus relates to a subject matter which this International Searching Authority is not required, under Article 17(2)(a)(i) of the PCT and Rule 39.1(iv) of the Regulations under the PCT, to search.
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.