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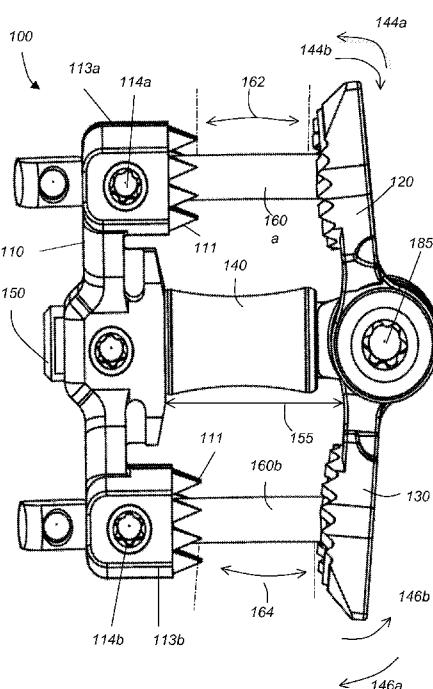
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[Continued on next page]

(54) Title: IMPROVED SPINOUS PROCESS FIXATION IMPLANT



(57) Abstract: An implantable spinous process fixation device includes an elongated component, top and bottom pivoting wing components, arranged opposite and parallel to the elongated component and separated from it by a spacer. First and second spinous processes of first and second adjacent vertebrae are clamped between a top portion of the elongated component and the top pivoting wing and between a bottom portion of the elongated component and the bottom pivoting wing, respectively, by pivoting the top and bottom pivoting wings toward the top and bottom portions of the elongated component. The clamping of the spinous processes stabilizes the positions of the adjacent vertebrae and prevents them from moving relative to each other.

FIG. 3



MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER***A61B 17/70(2006.01)i, A61B 17/68(2006.01)i, A61B 17/88(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)

A61B 17/70; A61F 2/30; A61F 2/44; A61F 5/00

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
 Japanese utility models and applications for utility models
 (Chinese Patents and application for patent)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 eKOMPASS(KIPO internal) & Keywords: spinous process, pivoting wing, stabilization, spacer

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003-0040746 A1 (MARGARET E. MITCHELL et al.) 27 February 2003 See Abstract, Figs. 1-15, Paragraphs [0053]-[0057]	1-11
A	US 5496318 A1 (HOWLAND; ROBERT S. et al.) 05 March 1996 See Figs. 1-11, Col.3 Line 23-Col.4 Line 10	1-11
A	US 2006-0247640 A1 (JONATHAN BLACKWELL et al.) 02 November 2006 See Figs. 1-5, Paragraphs [0029]-[0036]	1-11
A	US 2005-0102028 A1 (URI ARNIN et al.) 12 May 2005 See Figs.1-8D, Paragraphs [0019]-[0028]	1-11
A	US 2005-0267579 A1 (MARK REILEY et al.) 01 December 2005 See Abstract, Fig.6, Paragraphs [0070]-[0074]	1-11

 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
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- "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

06 JULY 2010 (06.07.2010)

Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2009/067611**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.: 12-19
because they relate to subject matter not required to be searched by this Authority, namely:
Claim 12 relates to a method for stabilizing two adjacent spinous processes in a spinal column, which is a substantial surgical method to treat human body. This method falls into the category of a method for treatment of the human body by surgery, therapy or diagnostic methods. The same reasoning applies to claims 13-19, which are dependent on claim 12 [Article 17(2)(a)(i), 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

- | | |
|--------------------------|---|
| <input type="checkbox"/> | The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee. |
| <input type="checkbox"/> | 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. |
| <input type="checkbox"/> | No protest accompanied the payment of additional search fees. |

INTERNATIONAL SEARCH REPORT

Information on patent family members

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