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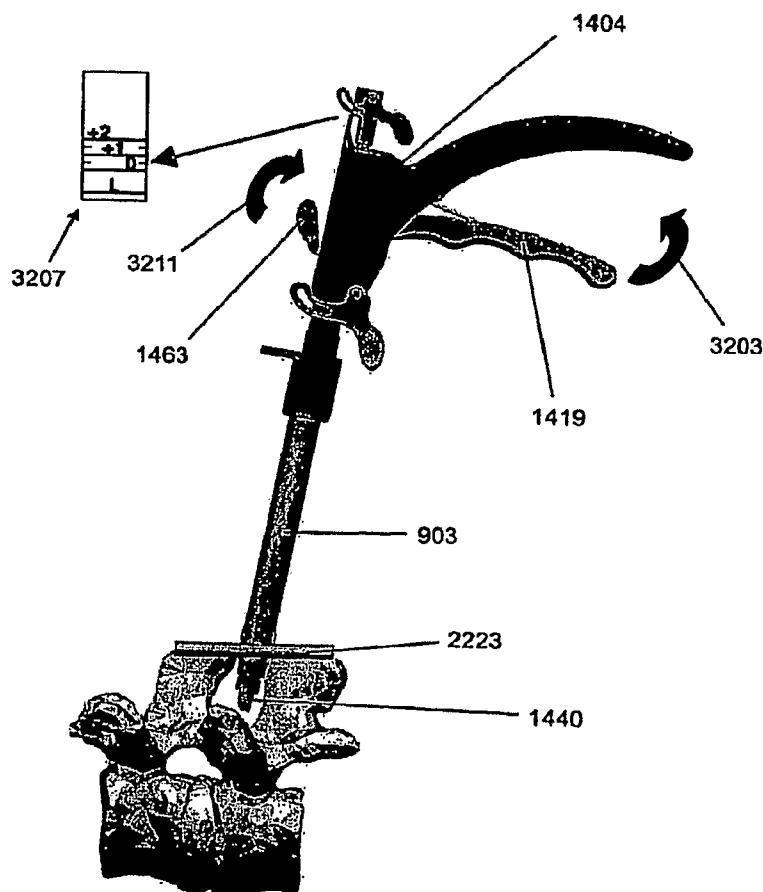
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| (71) Applicant (<i>for all designated States except US</i>): VERTI-FLEX, INC. [US/US]; 1954 Kellogg Avenue, Suite 100, Carlsbad, CA 92008 (US). | (84) Designated States (<i>unless otherwise indicated, for every kind of regional protection available</i>): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, TM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TN), 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, |
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[Continued on next page]

- (54) Title:** MINIMALLY INVASIVE TOOLING FOR DELIVERY OF INTERSPINOUS SPACER



(57) Abstract: A plurality of individual tools is provided where each tool is uniquely configured to perform a step or a portion of a step in a novel procedure associated with the implantation of a stabilizing device (e.g., an interspinous spacer) for stabilizing at least one spinal motion segment. The tools are usable individually, or more preferably as a tooling system in which the tools are collectively employed to implant an interspinous spacer, generally in a minimally invasive manner. For example, each of the tools is arranged with coordinated markings and/or other features to ensure consistent depths of insertion, proper orientation of the tools with respect to each other or an anatomical feature of the patient, and precise delivery of the spacer to maintain safe positioning throughout the implantation procedure.



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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23 April 2009

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2006/048614

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61B 17/70(2008.04)

USPC - 606/246

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 5/04, 2/08, 2/00, 2/44; A61B 17/32, 17/70, 17/88, 17/80, 17/86 (2008.04)

USPC - 606/53, 57,86A, 90, 172, 246, 260, 264, 279, 286, 297, 314, 321; 623/17.11

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 practicable, search terms used)

PatBase

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,762,629 A (KAMBIN et al) 09 June 1998 (09.06.1998) entire document	1-6,8-20,26-29,34-35, 38-41,45-49,55,63-69, 71-75, 82, 112, 119-122, 130-141, 144-153, 184-186, 191-195, 200-201, 203-205, 278-288, 299-303
Y	US 2004/0133077 A1 (OBENCHAIN et al) 08 July 2004 (08.07.2004) entire document	1-6,8-20,26-29,34-35, 38-41,45-49,55,63-69, 71-75, 82, 112, 119-122, 130-141, 144-153, 184-186, 191-195, 200-201, 203-205, 278-288, 299-303
Y	US 5,591,165 A (JACKSON) 07 January 1997 (07.01.1997) entire document	1-6,8-20,26-29,34-35, 38-41,45-49,55,63-69, 71-75, 82, 112, 119-122, 130-141, 144-153, 184-186, 191-195, 200-201, 203-205, 278-288, 299-303

☐ Further documents are listed in the continuation of Box C.

* 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 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

19 December 2008

Date of mailing of the international search report

03 FEB 2009

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2006/048614

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2005/0107800 A1 (FRANKEL et al) 19 May 2005 (19.05.2005) entire document	2
Y	US 2003/0028250 A1 (REILEY et al) 06 February 2003 (06.02.2003) entire document	112, 119-122, 130-141, 299-301
Y	US 5,195,526 A (MICHELSON) 23 March 1993 (23.03.1993) entire document	144-153, 184-186, 200-201, 203-205, 288 302-303

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2006/048614

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:

Group I, claims 1-207, 278-314, 323-334 drawn to a system of tools for performing a procedure on a patient's spine
 Group II, claims 208-277, 315-322 drawn a method and device to an insertion instrument for implanting an interspinous spacer in a patient
 Group III, claims 335-339, drawn to a method for performing a procedure on a patient's spine
 Group IV 340-345, drawn to a method for using a combination of individual tools from a tooling set

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 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.:
1-207, 278-314, 323-334

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.