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(71) Applicant (for all designated States except US): **WARSAW ORTHOPEDIC, INC.** [US/US]; 2500 Silveus Crossing, Warsaw, Indiana 46581 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **FERGUSON, Joe, W.** [US/US]; 3396 Fallen Woods Cove, Collierville, Tennessee 38017 (US).

(74) Agents: **WILLIS, Thomas L. Jr.** et al.; 710 Medtronic Parkway MS LC340, Minneapolis, Minnesota 55432 (US).

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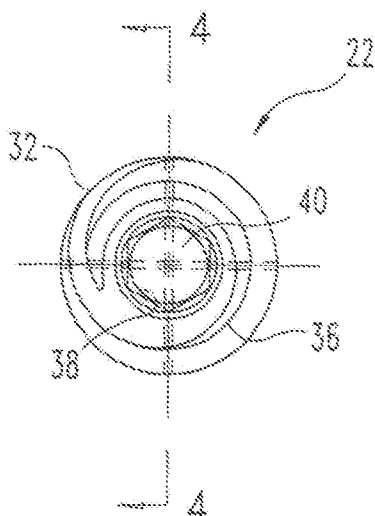
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(54) Title: ADJUSTABLE JACKING IMPLANT



(57) Abstract: An adjustable jacking implant useful in orthopedic surgery and associated methods are disclosed. The implant may be used to adjust the position of bones or other structures with respect to one another. In one embodiment, the implant may include a jack base, a jacking segment and a compressible spacer or sleeve. The implant may be inserted through a single stab or puncture entry. Jack base is placed in a first portion of a vertebra via a hole in an adjacent vertebra, in one embodiment, and the jacking segment is placed in the adjacent vertebra and connected to the base. After being connected, the depth of the adjustable portion of jacking segment in its vertebra determines the spacing between portions of the adjacent vertebrae.

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. A61B17/70 A61B17/86

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	WO 2006/110443 A (MOSKOWITZ MOSHEH [US]; MOSKOWITZ NATHAN [US]) 19 October 2006 (2006-10-19)	1,2,12
A	paragraph [0031] - paragraph [0035]; figures 1-3	3-11, 13-18
X	WO 2006/110738 A (ALPHASPIRE INC [US]) 19 October 2006 (2006-10-19)	1,6,10, 11
A	paragraph [0061] - paragraph [0063]; figures 8-13	12
X	WO 2004/069031 A (KINETIKOS MEDICAL INC [US]; REINDEL ERIC S [US]; TRAIL IAN A [GB]; WEI) 19 August 2004 (2004-08-19)	1
A	abstract; figures 1,2	12
A	US 4 554 914 A (KAPP JOHN P [US] ET AL) 26 November 1985 (1985-11-26) the whole document	1-18

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

☒ See patent family annex.

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Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Hansen, Soren

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
WO 2006110443	A	19-10-2006	US	2006241621 A1	26-10-2006
WO 2006110738	A	19-10-2006	AU	2006235414 A1	19-10-2006
			CA	2604888 A1	19-10-2006
			EP	1865860 A2	19-12-2007
			US	2006264954 A1	23-11-2006
WO 2004069031	A	19-08-2004	EP	1594411 A2	16-11-2005
			US	2004210227 A1	21-10-2004
US 4554914	A	26-11-1985	NONE		