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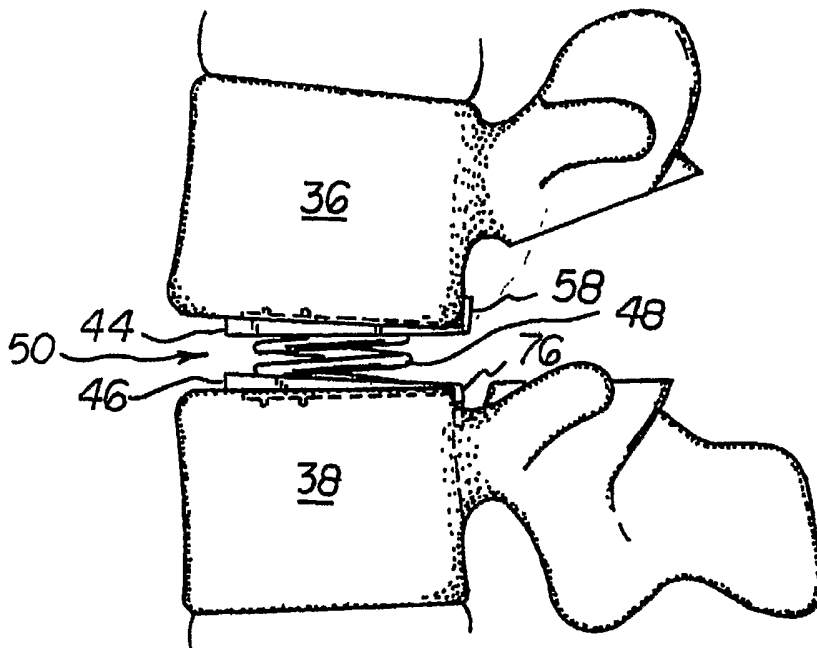
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IMPROVED VERTEBRAL IMPLANTS ADAPTED FOR POSTERIOR INSERTION



(57) Abstract: Disclosed is an endoprosthetic implant for a human spinal disc. The structure of the implant allows it to be inserted posteriorly. This insertion is accomplished by performing a partial discectomy in the affected region. An intervertebral space is then created by removing the fibrocartilage between the facing surfaces of adjacent vertebrae. The implant is then inserted into the intervertebral space. The implant is thus adapted to replace damaged or worn intervertebral discs. Furthermore, the structure of the implant, and its posterior insertion, alleviate most spinal pathologies.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/16523

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 17/56

US CL : 623/17.11

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)

U.S. : 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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| A | US 6,395,032 B1 (GAUCHET) 28 May 2002 (28.05.2002), see whole document | 1-10 |
| A | US Publication No. 2004/0024461 A1 (FERREE) 5 February 2004 (05.02.2004), see whole document | 1-10 |
| A | US 5,458,642 (BEER et al.) 17 October 1995 (17.10.1995), see whole document | 1-10 |



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 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

15 July 2005 (15.07.2005)

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/16523

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.: 1-10
because they relate to subject matter not required to be searched by this Authority, namely:
In claim 1, lines 3, 4, 6 and 7, claim 2, lines 3 and 4-5, as well as claim 6, lines 3, 4-5, 6, 7-8, applicant positively recites part of the human body, i.e., "a superior support positioned upon a vertebral surface". Thus, claims 1-10 include a human body within their scope and are therefore relate to subject matter not required to be searched by this Authority.
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 additional fees, this Authority did not invite payment of any 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.:

- 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.