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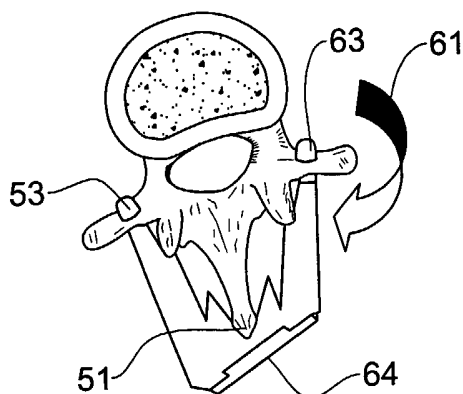
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claims and to be republished in the event of receipt of  
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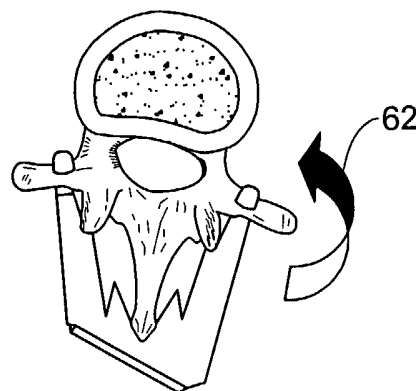
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For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: AN IMPLANT FOR TREATING IDIOPATHIC SCOLIOSIS



A



B

(57) Abstract: The present invention concerns implant for treating rotational malfunction of the spinal column comprising a linear plate, a set of retractors and claspings means. The present invention further concerns a method for treating Scoliosis by the implan-  
tation of said implant.

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# INTERNATIONAL SEARCH REPORT

International Application No  
IL2004/000296

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61B17/70

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 7 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, WPI Data, EMBASE, BIOSIS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 470 660 A (STICHTING TECH WETENSCHAPP) 12 February 1992 (1992-02-12) A rod is attached to the vertebrae in the longitudinal direction of the spinal column. The rod is bent and possibly twisted, corresponding to the curve and/or torsion of the spinal column. column 2, line 27 - column 4, line 7 figure 3	1,2,6-9, 11,13
A	US 4 269 178 A (KEENE JAMES S) 26 May 1981 (1981-05-26) Hook assembly for engaging a spinal column. the whole document ----- -/--	1,2,6-9, 11

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in 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 document 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

30 September 2004

Date of mailing of the international search report

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Name and mailing address of the ISA

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IL2004/000296

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>AHAMED MOHAIDEEN, DURGESH NAGARKATTI, JOHN V. BANTA, CHRISTOPHER L. FOLEY: "Not all rods are Harrington - An overview of spinal instrumentation in scoliosis treatment"</p> <p>PEDIATRIC RADIOLOGY, vol. 30, 1 January 2000 (2000-01-01), pages 110-118, XP002298648 ISSN: 0301-0449 Retrieved from the Internet: URL: <a href="http://www.springerlink.com/">http://www.springerlink.com/</a>&gt; the whole document</p> <p>-----</p>	1,2,6

## INTERNATIONAL SEARCH REPORT

### Box 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.: 14-21  
because they relate to subject matter not required to be searched by this Authority, namely:  
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
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 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.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No  
IL2004/000296

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0470660	A	12-02-1992	NL 9001778 A	02-03-1992
			AT 125137 T	15-08-1995
			DE 69111329 D1	24-08-1995
			DE 69111329 T2	07-03-1996
			DK 470660 T3	27-11-1995
			EP 0470660 A1	12-02-1992
			ES 2075332 T3	01-10-1995
			GR 3017718 T3	31-01-1996
			JP 3262349 B2	04-03-2002
			JP 4244149 A	01-09-1992
US 4269178	A	26-05-1981	AU 532978 B2	20-10-1983
			AU 5903880 A	11-12-1980
			CA 1150120 A1	19-07-1983
			DE 3021238 A1	11-12-1980
			FR 2458271 A1	02-01-1981
			GB 2051581 A , B	21-01-1981
			JP 56036944 A	10-04-1981
			NZ 193931 A	18-11-1983