

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
10 June 2004 (10.06.2004)

PCT

(10) International Publication Number  
**WO 2004/047650 A3**

(51) International Patent Classification<sup>7</sup>: **A61B 17/02**

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(21) International Application Number:  
PCT/US2003/037729

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(22) International Filing Date:  
24 November 2003 (24.11.2003)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/428,800 23 November 2002 (23.11.2002) US

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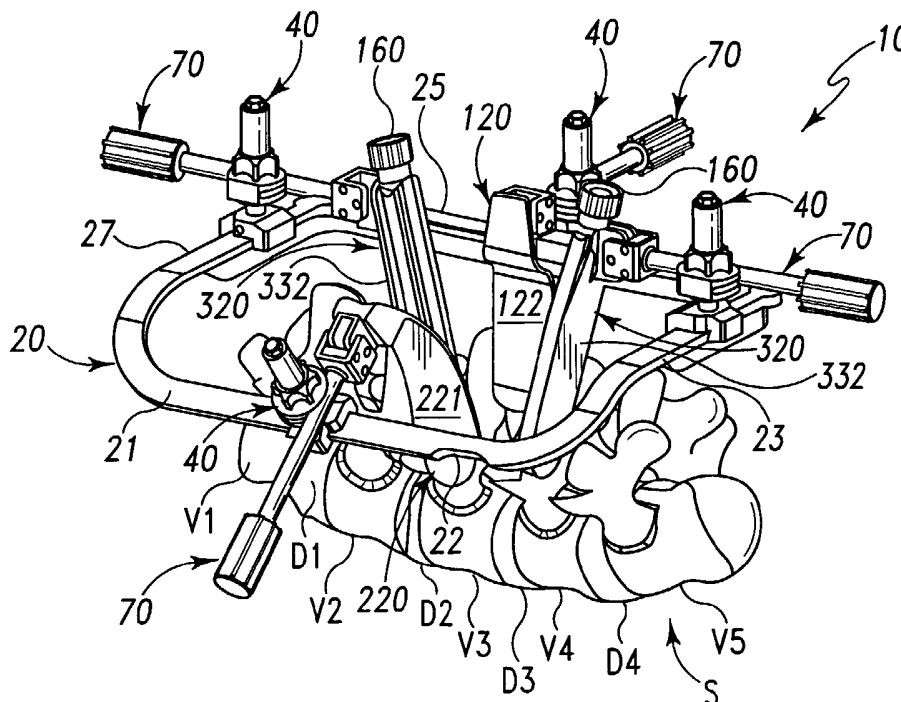
(84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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[Continued on next page]

(54) Title: ISTRACTION AND RETRACTION SYSTEM FOR SPINAL SURGERY



(57) Abstract: The surgical instrumentation system is adapted to provide an operative approach to the spinal column and maintain distraction of adjacent vertebrae. The system includes at least one retractor and a pair of opposite distractor mechanisms mounted to a frame. The distractor mechanisms each include an adjustment mechanism permitting the distractor mechanism to be pivoted relative to the vertebra and secured to the frame after being repositioned.

WO 2004/047650 A3

**Declaration under Rule 4.17:**

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT,

LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

**Published:**

— with international search report

**(88) Date of publication of the international search report:**

26 August 2004

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.

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 03/37729

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7 A61B17/02		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
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		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X  Y A	US 6 431 025 B1 (KOROS ET AL.) 13 August 2002 (2002-08-13) abstract; figure 7	1-7, 15, 16  8-11 38-40, 46-48
X  Y	----- DE 87 04 901 U (KLUGER) 23 July 1987 (1987-07-23) page 7, line 17 - page 9, line 13; figures 1-3,6,7 page 10, lines 21-31  ----- -/--	41, 44, 45   17, 18, 21-25, 32-40, 42, 43, 46-48
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.		
<input checked="" type="checkbox"/> 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  <p style="text-align: center;">19 May 2004</p>	Date of mailing of the international search report  <p style="text-align: center;">- 4. 06. 2004</p>	
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  <p style="text-align: center;">Giménez Burgos, R</p>	

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 03/37729

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 5 728 046 A (MAYER ET AL.) 17 March 1998 (1998-03-17)  abstract; figures	8-11,17, 18, 21-25, 32-40, 42,43, 46-48
X	FR 2 807 313 A (SOFAMOR) 12 October 2001 (2001-10-12) abstract; figures page 5, lines 26-30	1-8,15, 16
A		17,41
X	US 1 400 616 A (MCCRORY ET AL.) 20 December 1921 (1921-12-20) column 1, line 43 - column 2, line 73; figure 1 column 2, lines 90-100	1-7,15, 16
X	US 5 779 629 A (HOHLEN) 14 July 1998 (1998-07-14) abstract; figure 6 column 2, lines 15-25	1,15,16
X	US 6 361 492 B1 (SANTILLI) 26 March 2002 (2002-03-26) abstract; figures 1,4,5 column 5, lines 39-65	1,15,16
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A		17
A	US 6 139 493 A (KOROS ET AL.) 31 October 2000 (2000-10-31) figures	1,8-11, 17,41
A	FR 2 788 958 A (SOCIETE DE FABRICATION DE MATERIEL ORTHOPEDIQUE (SOFAMOR)) 4 August 2000 (2000-08-04) abstract; figures page 5, line 13 - page 6, line 36	17,41-44
A	FR 1 019 217 A (SAUVY) 19 January 1953 (1953-01-19) figures	26

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 03/37729

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 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.: 49-56  
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 II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

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**

International Application No. PCT/ US 03 /37729

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

Continuation of Box I.1

Claims Nos.: 49-56

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery

INTERNATIONAL SEARCH REPORT

International Application No. PCT/ US 03/ 37729

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-16

Surgical instrumentation system comprising a frame including two portions lying in two different surfaces, forming an angle with each other.

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2. claims: 17-48

Surgical instrumentation system comprising two anchors engageable to two vertebrae of the spine associated with a pair of pivoting distractor mechanisms.

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## INTERNATIONAL SEARCH REPORT

 International Application No  
 PCT/US 03/37729

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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DE 8704901	U	23-07-1987	DE 8704901 U1 23-07-1987
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