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(71) Applicant (for all designated States except US): **ORTHOSOFT INC.** [CA/CA]; 75 Queen Street, Suite 3300, Montréal, Québec H3C 2N6 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **COUTURE, Pierre** [CA/CA]; 8330A Lajeunesse, Montréal, Québec H2P 2B6 (CA). **PELLETIER, Benoît** [CA/CA]; 10361 Avenue St-Charles, Montréal, Québec H2C 2L7 (CA). **RICHARD, Alain** [CA/CA]; 5660 Decelles, Apt. 215,

Montréal, Québec H3T 1W6 (CA). **ABIVEN, Jean-Guil-  
laume** [FR/CA]; 4140 Côte Ste-Catherine, Apt. 21,  
Montréal, Québec H3T 1E3 (CA). **GARCEAU, Patrick**  
[CA/CA]; 3265 Linton, Apt. 14, Montréal, Québec H3S  
1S5 (CA).

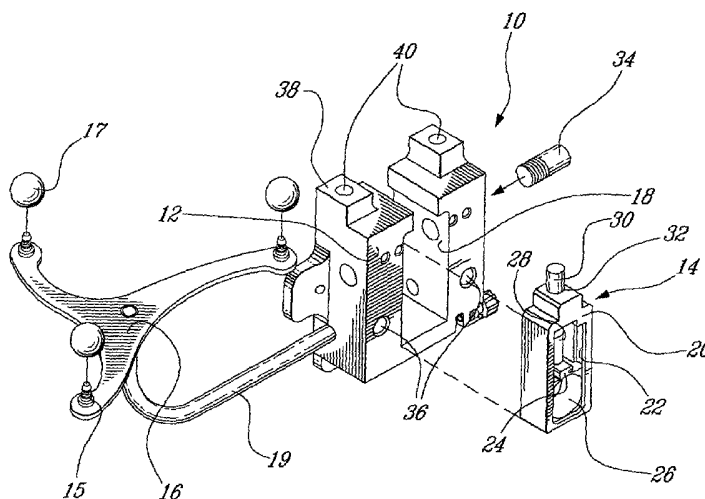
(74) Agent: **OGILVY RENAULT**; Suite 1600, 1981 McGill  
College Avenue, Montréal, Québec H3A 2Y3 (CA).

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[Continued on next page]

(54) Title: SURGICAL UNIVERSAL POSITIONING BLOCK AND TOOL GUIDE



(57) Abstract: A positioning block (10) for use in total knee replacement surgery, permitting five degrees-of-freedom movement relative to a bone element (39) to which it is fixed. The positioning block (10) comprises a mounting member (14) including a fastener receiving mount element (24) by means of which mounting member (14) is removably engaged to the bone element such that the mounting member (14) is selectively rotatable relative to the bone element, about three substantially perpendicular axes of rotation. Fastener receiving mount element (24) slides within a central guide slot (22) disposed within a mounting member body (20) which also forms part of mounting member (14). A guide body portion (12) is engaged with the mounting member (14) such that it is translatable relative there to along a proximal-distal axis (43) and together with the mounting member-body(20) is translatable relative to the fastener receiving mount element(24) along an anterior-posterior axis (47), while being rotationally fixed relative to the mounting member(14) such that the guide body portion(12) and the mounting member(14) rotate together relative to the bone element(39). Computer means identify and display the position of the positioning block(10).

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/CA 03/01307

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61B17/15

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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/095083 A1 (CINQUIN P. ET AL) 18 July 2002 (2002-07-18)	1,2
A	paragraphs '0021!, '0044!, '0057!, '0066!, '0067!, '0072!, '0074!; claims 8,10,21,33,37; figures 1,4	14,37
X	US 2002/068942 A1 (NEUBAUER T. AND IMMERZ M.) 6 June 2002 (2002-06-06) paragraphs '0005!, '0006!, '0018!, '0029!, '0030!	1,2
X	WO 02/36031 A (PRAXIM) 10 May 2002 (2002-05-10) page 3, line 32 - page 4, line 22 page 22, line 1 - line 26 figures 7,10,11	1,2
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Further documents are listed in the continuation of box C.       Patent family members are listed in annex.

° Special categories of cited documents :

<p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*E* earlier document but published on or after the international filing date</p> <p>*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)</p> <p>*O* document referring to an oral disclosure, use, exhibition or other means</p> <p>*P* document published prior to the international filing date but later than the priority date claimed</p>	<p>*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</p> <p>*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</p> <p>*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.</p> <p>*Z* document member of the same patent family</p>
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Date of the actual completion of the international search  <b>25 March 2004</b>	Date of mailing of the international search report  <b>-6. 04 2004</b>
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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  <b>Nice, P</b>
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA 03/01307

## 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.: 40-52  
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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Claims Nos.: 40-52

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

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-10

Computer assisted total knee replacement surgery system  
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2. claims: 11-39

Positioning block for use in total knee replacement surgery  
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3. claim: 53

Surgical instrument with rack and pawl mechanism  
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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/CA 03/01307

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 682 886 A (DELP S.L. ET AL) 4 November 1997 (1997-11-04) abstract	1,2
X	US 4 952 213 A (BOWMAN J.A. AND MCCLEARY L.G.) 28 August 1990 (1990-08-28)  column 3, line 46 - line 62 column 4, line 36 - column 5, line 13 column 5, line 34 - line 48 column 5, line 66 - column 6, line 5 column 6, line 64 - column 7, line 11 figure 1	11,14, 16-21, 30-37,39
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# INTERNATIONAL SEARCH REPORT

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PCT/CA 03/01307

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