

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
30 August 2007 (30.08.2007)

PCT

(10) International Publication Number
WO 2007/097853 A3

- (51) International Patent Classification:
A61B 17/15 (2006.01) A61B 17/17 (2006.01)
- (21) International Application Number:
PCT/US2007/001622
- (22) International Filing Date: 19 January 2007 (19.01.2007)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/773,491 15 February 2006 (15.02.2006) US
60/780,757 9 March 2006 (09.03.2006) US
- (71) Applicant (for all designated States except US):
OTISMED CORP [US/US]; 28312 Industrial Boulevard,
Suite G, Hayward, CA 94545 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): PARK, Ilwhan
[US/US]; 1743 Holland Circle, Walnut Creek, CA 94597
(US). HOWELL, Stephen, M. [US/US]; 4834 Roselin
Way, Elk Grove, CA 95758 (US). CHI, Charlie, W.

[US/US]; 2233 Petersburg Drive, Milpitas, CA 95035 (US).

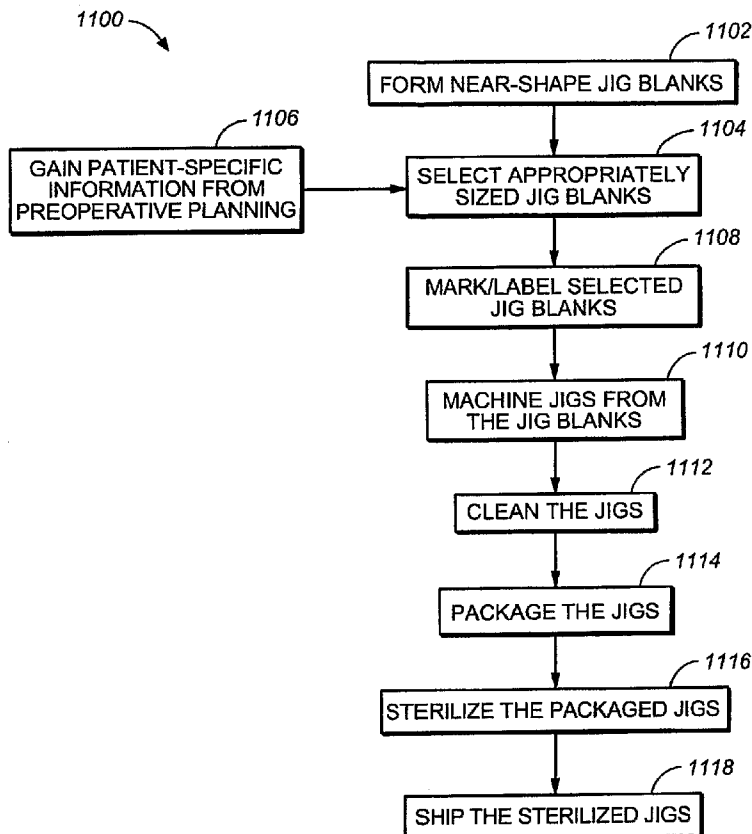
(74) Agents: JOHNSON, Wade, S. et al.; Dorsey & Whitney LLP, Republic Plaza Building, 370 17th Street, Suite 4700 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): 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, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: ARTHROPLASTY JIGS AND RELATED METHODS



(57) Abstract: A method, system and computer program for tracking an object including: identifying objects by correlating video data from at least one video device (812); determining that an object is stopped based on past motion data (816); determining if a stopped object is occluded (820); monitoring the properties of a stopped object (824); determining if a previously stopped object is moving (828); and resuming tracking if the previously stopped object is moving.

WO 2007/097853 A3



FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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.

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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

21 December 2007

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/001622

A. CLASSIFICATION OF SUBJECT MATTER INV. A61B17/15 A61B17/17		
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	US 2005/234461 A1 (BURDULIS ALBERT G JR [US] ET AL) 20 October 2005 (2005-10-20) paragraph [0025]; figures 4A,4B -----	1-31
X	WO 01/70142 A (KINAMED INC [US]) 27 September 2001 (2001-09-27) page 15, line 31 - line 33; figure 4 -----	1-8, 10, 12-30
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> 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 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 <h2 style="text-align: center;">9 July 2007</h2>	Date of mailing of the international search report <h2 style="text-align: center;">06/11/2007</h2>	
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 <h2 style="text-align: center;">Hamann, Joachim</h2>	

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2007/001622

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.: 36-39
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:

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.:

see annex

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

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

1. claims: 1-31

A method comprising forming an arthroplasty jig from a near-shape arthroplasty jig blank (Claims 1-18).

A method comprising forming a near-shape arthroplasty jig blank (Claims 19-22).

A near-shape arthroplasty jig blank (Claims 23-31).

2. claims: 32-35

A surface-matching device configured to position an arthroplasty jig at a target site in a body of a subject.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2007/001622

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005234461	A1	20-10-2005	
		AU 2005311558 A1	08-06-2006
		CA 2588907 A1	08-06-2006
		EP 1833387 A1	19-09-2007
		WO 2006060795 A1	08-06-2006
WO 0170142	A	27-09-2001	
		AU 4755101 A	03-10-2001
		EP 1265559 A1	18-12-2002
		US 6712856 B1	30-03-2004
		US 2004098133 A1	20-05-2004