(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
23 October 2008 (23.10.2008)

PCT

(10) International Publication Number
WO 2008/125870 A3

(51) International Patent Classification:
A61B 19/00 (2006.01) *A61B 5/00* (2006.01)
A61B 1/04 (2006.01) *F16M 11/04* (2006.01)
A61B 1/303 (2006.01)

(21) International Application Number:
PCT/GB2008/001352

(22) International Filing Date: 11 April 2008 (11.04.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/923.121 11 April 2007 (11.04.2007) US

(71) Applicant *(for all designated States except US)*: **FORTH-PHOTONICS LIMITED** [GB/GB]; 20-22 Bedford Row, London WC1R 4JS (GB).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **BALAS, Konstantinos**; 31 Eirinis Street, GR-15 341 AG. Paraskevi, Athens (GR).

(74) Agent: **SPENCER, Matthew, Peter**; Boult Wade Tennant, Verulam Gardens, 70 Gray's Inn Road, London WC1X 8BT (GB).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, 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, LY, MA, MD, ME, 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, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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:
23 July 2009

(54) Title: A SUPPORTING STRUCTURE AND A WORKSTATION INCORPORATING THE SUPPORTING STRUCTURE FOR IMPROVING, OBJECTIFYING AND DOCUMENTING IN VIVO EXAMINATIONS OF THE UTERUS

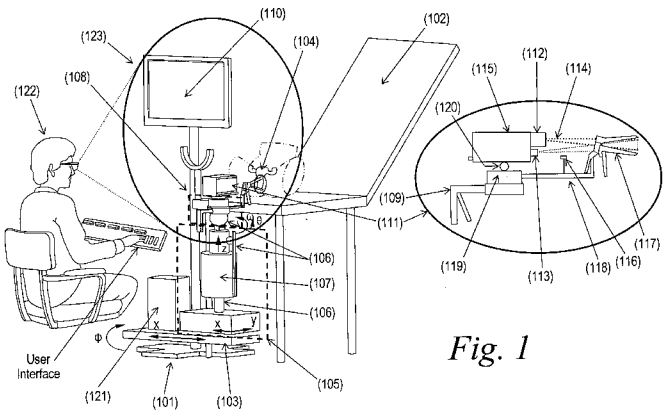


Fig. 1

(57) Abstract: A supporting structure forms part of an integrated portable imaging workstation which is operable by an examiner for improving, objectifying and documenting in vivo.examination of the uterus. The workstation includes at least an imaging head module (111) operably-connected to the supporting structure for imaging an examination area of a patient. The supporting structure controls movement and positioning of at least the imaging head module in to an imaging position in close proximity to the examination area and away from the examination area allowing for the patient's access to the examination area. The supporting structure incorporates control means for locking the imaging head module in position and unlocking to allow translation away from the examination area. In particular, the supporting structure may incorporate a base member (101), a planar positioning structure (103), a space micro-positioning structure (105), a weight • counterbalancing mechanism, a pivoting structure (108) to which is connected the imaging head module and a handle for the control of the position of said space micro-positioning and pivoting structures. Motion of the space micro-positioning structure and the pivoting structure may be locked and unlocked.

WO 2008/125870 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2008/001352

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61B19/00 A61B1/04 A61B1/303 A61B5/00 F16M11/04

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 F16M A61M

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, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006/020163 A1 (NG RAYMOND C [HK]) 26 January 2006 (2006-01-26) paragraphs [0028] - [0047]; figures 1-6	1-7,10, 11,15, 21,23
X	US 6 425 865 B1 (SALCUDEAN SEPTIMIU E [CA] ET AL) 30 July 2002 (2002-07-30) columns 2-8; figures 1,2	1-4,6-8, 10,11, 21,23
X	US 5 667 186 A (LUBER JOACHIM [DE] ET AL) 16 September 1997 (1997-09-16) the whole document	1-8, 10-13
X	WO 97/00649 A (NG WAN SING [SG]) 9 January 1997 (1997-01-09)	1-10,13, 16-18, 21-23
Y	pages 9,15,17; figures 1,2,11-14	19
	-/--	

[X] Further documents are listed in the continuation of Box C.

[X] 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	Date of mailing of the international search report
22 April 2009	08/06/2009

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Herberhold, C

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2008/001352

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	EP 1 769 731 A (FORTH PHOTONICS LTD [GB]) 4 April 2007 (2007-04-04) figures 1,2	1,20 30-33
X	EP 1 520 548 A (OLYMPUS CORP [JP]) 6 April 2005 (2005-04-06) figures 1-7	1,3-11, 14,18
Y	US 6 626 830 B1 (CALIFIORE ANTONIO [IT] ET AL) 30 September 2003 (2003-09-30) figure 7	19
X	WO 97/00404 A (FLYNN THOMAS S [US]) 3 January 1997 (1997-01-03) page 2; figure 1	1-4,6,7, 9-12
X Y	WO 01/72214 A (FOUNDATION FOR RES AND TECHNOL [GR]; BALAS KONSTANTINOS [GR]; PELECOUD) 4 October 2001 (2001-10-04) the whole document	1,24-27, 30,32, 33,35, 39,41, 43-49, 52,53 28, 30-33, 42,50
X Y	DE 93 18 307 U1 (DAMMINGER RUDOLF DR [DE]) 10 March 1994 (1994-03-10) the whole document	1,24-26, 36,52,53 50,51
X	US 6 088 612 A (BLAIR KERRY L [US]) 11 July 2000 (2000-07-11) figures 1,3	1,24,25, 29,36,51
Y	US 6 803 931 B1 (ROMAN KENDYL A [US] ET AL) 12 October 2004 (2004-10-12) columns 2-4	50,51
Y	US 5 716 321 A (KERIN JOHN [AU] ET AL) 10 February 1998 (1998-02-10) abstract	28
Y	US 2005/277811 A1 (RICHARDS CHARLOTTE [US] ET AL) 15 December 2005 (2005-12-15) paragraph [0008]	42

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2008/001352

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.:
because they relate to subject matter not required to be searched by this Authority, namely:

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:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers 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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-23

A supporting structure comprising a planar positioning structure movably mounted on a base member solving the problem to allow patient's access to the examination platform.

---

2. claims: 24-53

An integrated portable imaging workstation solving the problem of improving, objectifying and documenting in vivo examination of the uterus.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/GB2008/001352

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006020163 A1	26-01-2006	NONE	
US 6425865 B1	30-07-2002	NONE	
US 5667186 A	16-09-1997	CH 688161 A5	30-05-1997
		DE 4334069 A1	13-04-1995
		JP 3658014 B2	08-06-2005
		JP 7016239 A	20-01-1995
		JP 2005052679 A	03-03-2005
WO 9700649 A	09-01-1997	AU 2997095 A	22-01-1997
		JP 10505286 T	26-05-1998
		US 5820623 A	13-10-1998
EP 1769731 A	04-04-2007	AT 424755 T	15-03-2009
		CN 101277641 A	01-10-2008
		WO 2007036744 A2	05-04-2007
		JP 2009509606 T	12-03-2009
		US 2008306345 A1	11-12-2008
EP 1520548 A	06-04-2005	DE 602004003318 T2	08-03-2007
		JP 2005125056 A	19-05-2005
		US 2005075536 A1	07-04-2005
US 6626830 B1	30-09-2003	NONE	
WO 9700404 A	03-01-1997	AU 6179596 A	15-01-1997
WO 0172214 A	04-10-2001	AU 4442301 A	08-10-2001
		BR 0108944 A	03-06-2003
		CA 2400702 A1	04-10-2001
		CN 1419428 A	21-05-2003
		EP 1267707 A1	02-01-2003
		FI 20021477 A	14-08-2002
		JP 4217403 B2	04-02-2009
		JP 2003527915 T	24-09-2003
		RU 2288636 C2	10-12-2006
		US 2003163049 A1	28-08-2003
DE 9318307 U1	10-03-1994	NONE	
US 6088612 A	11-07-2000	NONE	
US 6803931 B1	12-10-2004	US 2004250216 A1	09-12-2004
US 5716321 A	10-02-1998	AU 715261 B2	20-01-2000
		AU 7252296 A	30-04-1997
		CA 2231607 A1	17-04-1997
		EP 0955857 A1	17-11-1999
		JP 2001517962 T	09-10-2001
		WO 9713451 A1	17-04-1997
		US 5873815 A	23-02-1999
		US 5935056 A	10-08-1999
US 2005277811 A1	15-12-2005	CN 101026989 A	29-08-2007
		EP 1796532 A2	20-06-2007
		JP 2008500112 T	10-01-2008
		WO 2005115223 A2	08-12-2005