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[Continued on next page]

(54) **Title:** SYSTEMS AND DEVICES FOR AN INTEGRATED IMAGING SYSTEM WITH REAL-TIME FEEDBACK LOOPS AND METHODS THEREFOR

(57) **Abstract:** An integrated imaging system is invented for creating an optimal imaging session by importing information in real time from several sources and using that information to automatically and continuously adjust the parameters of the imaging session so as to create the optimal session for the prescribed testing session.

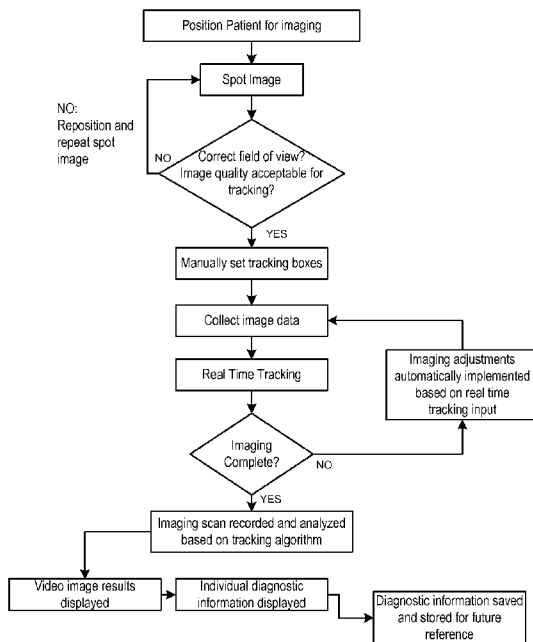


FIG. 11

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2010/050210**A. CLASSIFICATION OF SUBJECT MATTER***A61B 6/02(2006.01)i, A61B 5/055(2006.01)i, A61B 6/08(2006.01)i*

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 6/02; A61B 5/05; A61B 5/055; A47B 13/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords:imaging, motion, skeletal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 7502641 B2 (BREEN ALAN) 10 March 2009 See abstract, claims 1,7 and figures 1a,1b	1-76
A	US 6963768 B2 (VINCENT B. HO et al.) 08 November 2005 See abstract, claims 10,19,23	1-76
A	US 2006-0020196 A1 (ILAN ELIAS) 26 January 2006 See abstract, claims 1,2 and figure 1	1-76
A	US 5810006 A1 (VOTRUBA; JAN et al.) 22 September 1998 See abstract and claim 20	1-76

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

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"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

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date		
US 7502641 B2	10.03.2009	AT 346544 T	15.12.2006		
		AU 2003-244854 A1	23.01.2004		
		DE 60310078 D1	11.01.2007		
		DE 60310078 T2	06.06.2007		
		DK1519681T3	10.04.2007		
		EP 1519681 A1	06.04.2005		
		EP 1519681 B1	29.11.2006		
		ES 2277087 T3	01.07.2007		
		US 2005-0259794 A1	24.11.2005		
		US 2008-0125678 A1	29.05.2008		
		WO 2004-004570 A1	15.01.2004		
		WO 2004-004570 A8	16.12.2004		
		US 6963768 B2	08.11.2005	EP 1362550 A1	19.11.2003
				JP 2004-000611 A	08.01.2004
US 2003-0216637 A1	20.11.2003				
US 2005-0171423 A1	04.08.2005				
US 7738944 B2	15.06.2010				
US 2006-0020196 A1	26.01.2006	AU 2003-224016 A1	13.10.2003		
		CA 2480641 A1	09.10.2003		
		CN 1646060 A	27.07.2005		
		CN 1646060 C0	09.01.2008		
		DE 102004020783 A1	24.11.2005		
		EP 1489966 A1	29.12.2004		
		EP 1489966 B1	08.11.2006		
		EP 1742579 A1	17.01.2007		
		JP 2005-534351 A	17.11.2005		
		JP 2007-534396 A	29.11.2007		
		JP 2007-534396 T	29.11.2007		
		KR 10-2005-0008668 A	21.01.2005		
		US 2003-0184296 A1	02.10.2003		
		US 2009-0025732 A1	29.01.2009		
		US 7822462 B2	26.10.2010		
		WO 03-082107 A1	09.10.2003		
WO 2005-102173 A1	03.11.2005				
US 5810006 A1	22.09.1998	US 05724970A A	10.03.1998		
		US 05772595A A	30.06.1998		
		US 05899859A A	04.05.1999		