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(54) Title: MULTICAMERA DEVICE TRACKING

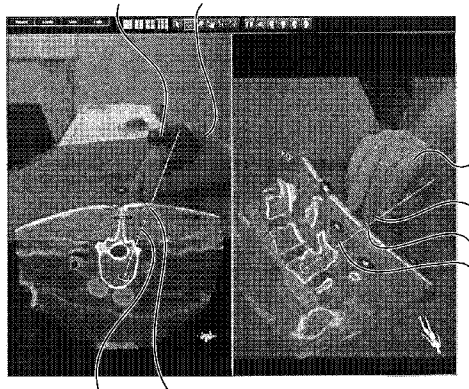
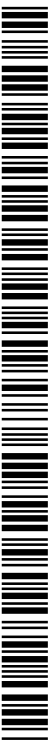


Fig. 11

(57) Abstract: The present invention relates to tracking an interventional device. In order to provide a facilitated and simplified real-time tracking of an interventional device, a medical imaging system (10) for tracking an interventional device is provided, that comprises an interface unit (12), and a processing unit (14). The interface unit is configured to provide first image data (18) of a first part of an interventional device, which first part is arranged outside an object. The first image data comprises 3D image data. The interface unit is configured to provide second image data (20) of a second part of the interventional device, which second part is a continuation of the first part, and which second part is arranged inside the object. The second image data comprises 2D image data. The processing unit is configured to compute a first 3D model portion of the interventional device based on the first image data, and to compute a second 3D model portion of the interventional device based on the second image data and the first model portion. The interface unit is configured to provide data of a graphical representation (22) of the interventional device based on the first and second 3D model portions.



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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-Internal, WPI Data, INSPEC		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>CHAN C ET AL: "A needle tracking device for ultrasound guided percutaneous procedures", ULTRASOUND IN MEDICINE AND BIOLOGY, NEW YORK, NY, US, vol. 31, no. 11, November 2005 (2005-11), pages 1469-1483, XP027605481, ISSN: 0301-5629 [retrieved on 2005-11-01] abstract section: "Methods"</p> <p style="text-align: center;">----- -/--</p>	1-15
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
<p>* Special categories of cited documents :</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent 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>"&" document member of the same patent family</p>		
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A	KHOSRAVI S ET AL: "One-step Needle Pose Estimation for Ultrasound Guided Biopsies", 2007 ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY : [EMBC '07] ; LYON, FRANCE, 22 - 26 AUGUST 2007 ; [IN CONJUNCTION WITH THE BIENNIAL CONFERENCE OF THE SOCIÉTÉ FRANÇAISE DE GÉNIE BIOLOGIQUE ET MÉDICAL (SFGB, 22 August 2007 (2007-08-22), pages 3343-3346, XP031336925, ISBN: 978-1-4244-0787-3 abstract	1-15
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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