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(71) Applicant: **MEDISON CO., LTD.**
Kangwon-do 250-870 (KR)

(72) Inventor: **Shin, Seong Chul**
Seoul 135-280 (KR)

(74) Representative: **Lorenz, Werner**
Lorenz & Kollegen
Patentanwälte Partnerschaftsgesellschaft
Alte Ulmer Strasse 2
89522 Heidenheim (DE)

(54) Apparatus and method for displaying an ultrasound image

(57) Embodiments of the present invention may provide an apparatus and a method of displaying a 3-dimensional ultrasound image formed based on 2-dimensional ultrasound images in an ultrasound diagnostic system. The method of displaying an ultrasound image in an ultrasound diagnostic system, comprises: a) forming a plurality of sequential 2-dimensional ultrasound images based on ultrasound echo signals reflected from a predetermined region of a target object; b) compensating for motions occurring between the 2-dimensional ultrasound images; c) selecting a predetermined number of consecutive 2-dimensional ultrasound images from the motion-compensated 2-dimensional ultrasound images; d) superposing the selected 2-dimensional ultrasound images to form a 3-dimensional ultrasound image; e) setting at least one line on the 3-dimensional ultrasound image and cutting the 3-dimensional ultrasound image along the line to obtain a plurality of cutting planes; f) selecting one cutting plane from the cutting planes; and g) rendering the selected cutting plane and displaying the rendered cutting plane.

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EUROPEAN SEARCH REPORT

Application Number
EP 07 00 8042

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	AARON FENSTER, DÓNAL B. DOWNEY AND H NEALE CARDINAL: "Three-dimensional ultrasound imaging", PHYSICS IN MEDICINE AND BIOLOGY, vol. 46, 2001, pages R67-R99, XP002662032,	1,6	INV. G06T7/20 G06T15/00 A61B8/00
Y	* sections 3.2.4, 6 *	2-5,7-10	

Y	HAN K J ET AL: "Low complexity dynamic region and translational motion estimation for video indexing", MULTIMEDIA SIGNAL PROCESSING, 1998 IEEE SECOND WORKSHOP ON REDONDO BEACH, CA, USA 7-9 DEC. 1998, PISCATAWAY, NJ, USA,IEEE, US, 7 December 1998 (1998-12-07), pages 547-552, XP010318326, DOI: 10.1109/MMSP.1998.739038 ISBN: 978-0-7803-4919-3 * section "Introduction" *	2-5,7-10	

TECHNICAL FIELDS SEARCHED (IPC)

G06T

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Berlin	25 October 2011	dos Santos, Luís

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
O : non-written disclosure
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T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

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EPO FORM 1503 03.82 (P04C01)

专利名称(译)	用于显示超声图像的设备和方法		
公开(公告)号	EP1873719A3	公开(公告)日	2011-12-07
申请号	EP2007008042	申请日	2007-04-20
申请(专利权)人(译)	MEDISON CO.，LTD.		
当前申请(专利权)人(译)	MEDISON CO.，LTD.		
[标]发明人	SHIN SEONG CHUL		
发明人	SHIN, SEONG CHUL		
IPC分类号	G06T7/20 G06T15/00 A61B8/00 G06T15/08		
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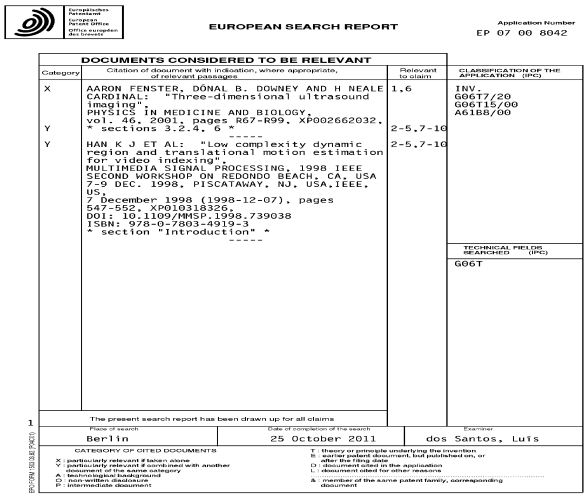
代理机构(译)	LORENZ，WERNER		
优先权	1020060057585 2006-06-26 KR		
其他公开文献	EP1873719A2		
外部链接	Espacenet		

摘要(译)

本发明的实施例可以提供一种在超声诊断系统中显示基于二维超声图像形成的三维超声图像的装置和方法。在超声诊断系统中显示超声图像的方法包括：a）基于从目标对象的预定区域反射的超声回波信号形成多个连续的2维超声图像;b）补偿在二维超声图像之间发生的运动;c）从运动补偿的二维超声图像中选择预定数量的连续二维超声图像;d）叠加所选择的二维超声图像以形成三维超声图像;e）在三维超声图像上设置至少一条线并沿着线切割三维超声图像以获得多个切割平面;f）从切割平面中选择一个切割平面;g）渲染选定的切割平面并显示渲染的切割平面。



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