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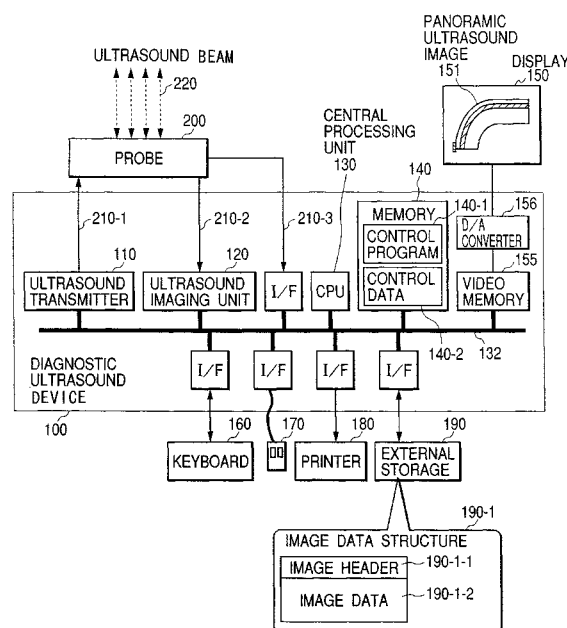
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(54) Method and device of synthesizing panorama image from ultrasonic images

(57) A cheap, very operable ultrasound diagnosing device capable of forming a panorama slice image in a real time manner is realized. The device comprises: an imaging unit 120 for converting ultrasound data obtained from a probe 200 into an image; computers (130, 140) having a shift amount detecting function of detecting a shift amount between formed images by the operation of the probe 200 and a rotation amount detecting function of detecting a rotation amount between slice images generated by the operation of the probe 200; and panorama image displaying means 150 for displaying a panorama image 151 obtained by connecting the sequence of slice images captured during diagnosis in a plane manner in accordance with the shift amount and the rotation amount detected by the computers in parallel to the motion image display. Thus, the panorama image can be formed in a real time manner from the sequence of slice images obtained by the probe. The panorama image forming state can be recognized on a display momentarily and an erroneous probe operation can be corrected.

FIG. 1





European Patent
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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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Y	* column 10, line 32 - line 33 * -----	3	
X	US 5 832 110 A (HULL JONATHAN J) 3 November 1998 (1998-11-03) * column 1, line 6 - line 15 * * column 2, line 15 - line 24 *	1	
Y	* column 3, line 56 - line 64 * -----	3	
A	YONGMIN KIM: "Real-time medical imaging with multimedia technology" INFORMATION TECHNOLOGY APPLICATIONS IN BIOMEDICINE, 1997. ITAB '97., PROCEEDINGS OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY REGION 8 INTERNATIONAL CONFERENCE PRAGUE, CZECH REPUBLIC 7-9 SEPT. 1997, NEW YORK, NY, USA, IEEE, US, 7 September 1997 (1997-09-07), pages 33-37, XP010265406 ISBN: 0-7803-4318-2 * page 35 * Last paragraph * * page 36 * First paragraph * -----	1-22	
			TECHNICAL FIELDS SEARCHED (IPC)
			G06T
The present search report has been drawn up for all claims			
Place of search Berlin		Date of completion of the search 18 November 2005	Examiner dos Santos, L
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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专利名称(译)	从超声图像合成全景图像的方法和装置		
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摘要(译)

实现了一种廉价, 可操作的超声诊断装置, 能够以实时方式形成全景切片图像。该装置包括: 成像单元120, 用于将从探头200获得的超声数据转换为图像; 计算机 (130, 140) 具有通过探头200的操作检测形成的图像之间的偏移量的偏移量检测功能和检测通过探头200的操作产生的切片图像之间的旋转量的旋转量检测功能; 全景图像显示装置150用于显示全景图像151, 该全景图像151是通过根据由计算机检测到的移动量和旋转量与运动图像显示并行地以平面方式连接在诊断期间捕获的切片图像序列而获得的。因此, 可以从探针获得的切片图像序列以实时方式形成全景图像。可以在显示器上暂时识别全景图像形成状态, 并且可以校正错误的探测操作。

FIG. 1

