



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
13.01.2010 Bulletin 2010/02

(51) Int Cl.:
A61B 8/00 (2006.01) **G01S 7/52** (2006.01)
G10K 11/34 (2006.01)

(43) Date of publication A2:
01.10.2008 Bulletin 2008/40

(21) Application number: **08005681.5**

(22) Date of filing: **26.03.2008**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR
Designated Extension States:
AL BA MK RS

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(30) Priority: **28.03.2007 JP 2007085918**

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(54) **Ultrasonic imaging apparatus and ultrasonic velocity optimization method**

(57) A resolution optimization unit (17) determines an optimal sound velocity corresponding to a tissue component at each position in a scan slice, and calculates a reception delay time or the like for each reception beam from each position in the scan slice- A control processor (29) executes delay addition processing in a scan for

acquiring an ultrasonic image actually used for diagnosis by using the reception delay time calculated using an optimal sound velocity. This can correct the difference between the set sound velocity used for the calculation of a reception delay time and the actual in vivo sound velocity and acquire an ultrasonic image with optimized resolution.

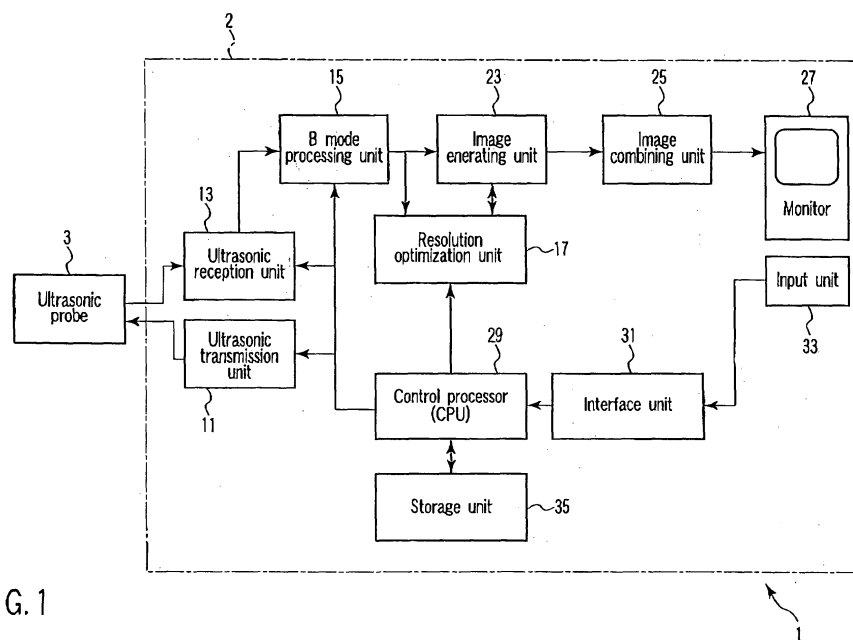


FIG. 1



EUROPEAN SEARCH REPORT

Application Number
EP 08 00 5681

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 6 305 225 B1 (BAE MOO-HO [KR] ET AL) 23 October 2001 (2001-10-23) * figure 4 * * column 3, lines 11-46 * * column 4, lines 22-62 * * column 5, lines 1-66 * -----	1-18	INV. A61B8/00 G01S7/52 G10K11/34
X	US 5 638 820 A (CHEN JIAN-FENG [US] ET AL) 17 June 1997 (1997-06-17) * figures 4-6 * * column 4, line 1 - column 5, line 62 * -----	1-4,6-8, 10-13, 15-17	
X	US 2003/092990 A1 (BABA HIROTAKA [JP] ET AL) 15 May 2003 (2003-05-15) * paragraphs [0060], [0067], [0070] - [0078] * -----	1,6,7, 10,15,16	
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The present search report has been drawn up for all claims			
Place of search Berlin		Date of completion of the search 8 December 2009	Examiner Kronberger, Raphael
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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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 08 00 5681

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The members are as contained in the European Patent Office EDP file on
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专利名称(译)	超声成像设备和超声速度优化方法		
公开(公告)号	EP1974672A3	公开(公告)日	2010-01-13
申请号	EP2008005681	申请日	2008-03-26
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IPC分类号	A61B8/00 G01S7/52 G10K11/34		
CPC分类号	A61B8/00 A61B8/54 G01S7/52046 G01S7/52049 G01S15/8979		
代理机构(译)	KRAMER - HARSH - 施密特陈		
优先权	2007085918 2007-03-28 JP		
其他公开文献	EP1974672B9 EP1974672B1 EP1974672A2		
外部链接	Espacenet		

摘要(译)

分辨率优化单元 (17) 确定与扫描切片中的每个位置处的组织成分对应的最佳声速，并且计算来自扫描切片A控制处理器中的每个位置的每个接收束的接收延迟时间等 (29) 通过使用利用最佳声速计算的接收延迟时间，在扫描中执行延迟相加处理，以获取实际用于诊断的超声图像。这可以校正用于计算接收延迟时间的设定声速与实际体内声速之间的差异，并获得具有优化分辨率的超声图像。

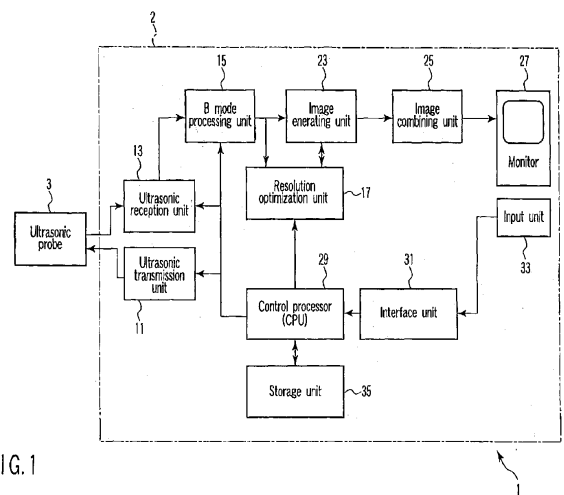


FIG.1