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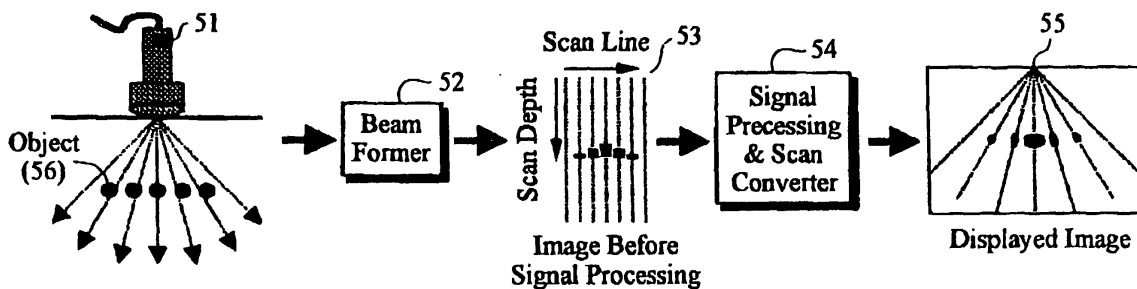
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(54) **Ultrasound imaging system for performing receiving focusing at points corresponding to display pixels and method thereof**

(57) All RF data received by transducers in response to an ultrasonic signal that was transmit-focused on a point along a predetermined scan lines are stored to compute display data for those points of an object that are not necessarily correspond to the pixels of the screen of a display device. For the determination of dis-

play data for each pixel point, reflected ultrasonic signals from multiple points around the point of interest are found and used to detect the peak of a waveform constituted by the reflected ultrasonic signals. With this scheme, the distortion due to conventional interpolation used for a limited number of scan lines can be greatly reduced.

Fig. 5





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EUROPEAN SEARCH REPORT

Application Number
EP 01 10 3796

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X	US 5 390 674 A (ROBINSON BRENT S ET AL) 21 February 1995 (1995-02-21) * abstract; figures 1,5-7 * * column 1, line 24 - column 4, line 37 * * column 5, line 40 - column 6, line 37 * * -----	1-8	
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A	O'DONNELL M: "Efficient parallel receive beam forming for phased array imaging using phase rotation (medical US application)" ULTRASONICS SYMPOSIUM, 4 December 1990 (1990-12-04), pages 1495-1498, XP010010011 * the whole document * * -----	1-8	TECHNICAL FIELDS SEARCHED (Int.Cl.7) G01S G10K
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 22 July 2004	Examiner Reuss, T
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
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	用于在对应于显示像素的点处执行接收聚焦的超声成像系统及其方法		
公开(公告)号	EP1126288A3	公开(公告)日	2004-09-15
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当前申请(专利权)人(译)	MEDISON CO. , LTD.		
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优先权	1020000007236 2000-02-16 KR		
其他公开文献	EP1126288B1 EP1126288A2		
外部链接	Espacenet		

摘要(译)

响应于在预定扫描线上的点上发射聚焦的超声信号而由换能器接收的所有RF数据被存储以计算对象的那些点的显示数据，所述对象不一定对应于屏幕的像素。显示设备。为了确定每个像素点的显示数据，找到来自感兴趣点周围的多个点的反射超声信号，并用于检测由反射的超声信号构成的波形的峰值。利用该方案，可以大大减少由于用于有限数量的扫描线的传统插值引起的失真。

Fig. 5

