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(54) **Ultrasound diagnostic apparatus**

(57) An ultrasound diagnostic apparatus includes a probe which outputs RF signals. There are N phase detectors for converting the RF signals outputted from the probe into baseband signals In and Qn, where "N" denotes a first predetermined natural number and "n" denotes a second predetermined natural number set as $2 \leq n \leq N$. A reception beam former operates for process-

ing the baseband signals In and Qn into a time-division-multiplexed signal. The reception beam former includes a device for multiplying the baseband signals In and Qn by phase shift data to generate multiplication-resultant signals, a device for delaying the multiplication-resultant signals to generate delay-resultant signals, and a device for combining the delay-resultant signals into the time-division-multiplexed signal.

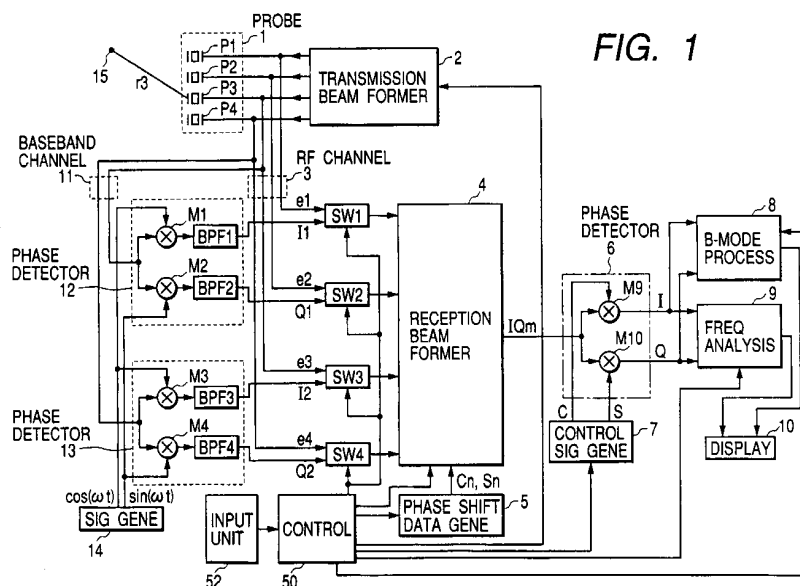


FIG. 1



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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 (Int.Cl.7)
X	US 5 882 307 A (GEE ALBERT ET AL) 16 March 1999 (1999-03-16) * abstract; figures 2A-C,3 * * column 9, line 42 - column 11, line 19 * * column 12, line 49 - column 13, line 63 * * column 24, line 23 - column 25, line 53 * * column 30, line 39 - column 31, line 67 *	1	G01S15/89 G01S7/52 G10K11/34
Y	--- US 4 598 589 A (RILEY JAMES K ET AL) 8 July 1986 (1986-07-08) * abstract; figure 3 * * column 1, line 6 - column 2, line 61 *	1	
Y	--- US 5 058 594 A (LAZENBY JOHN C) 22 October 1991 (1991-10-22) * column 11, line 59-67 *	1	
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The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 27 February 2003	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
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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27-02-2003

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外部链接	Espacenet		

摘要(译)

超声诊断设备包括输出RF信号的探针。存在N个相位检测器，用于将从探头输出的RF信号转换为基带信号In和Qn，其中“N”表示第一预定自然数，“n”表示设定为 $2 \leq n \leq N$ 的第二预定自然数。接收波束形成器用于将基带信号In和Qn处理成时分复用信号。接收波束形成器包括用于通过相移数据将基带信号In和Qn相乘以产生乘法结果信号的装置，用于延迟相乘结果信号以产生延迟结果信号的装置，以及用于组合延迟的装置。结果信号进入时分复用信号。

