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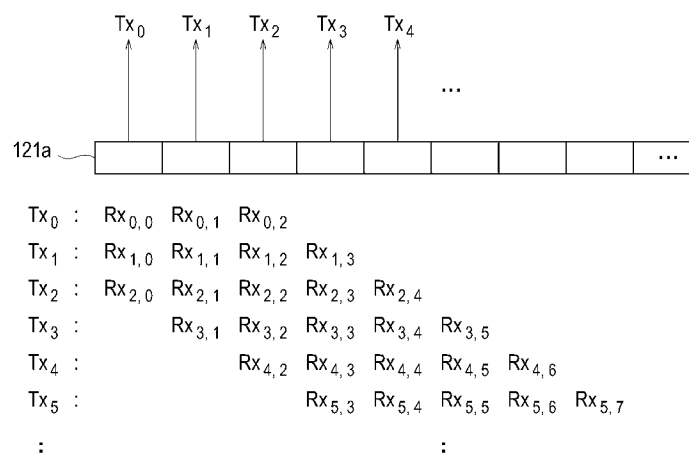
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(54) **Ultrasound system and method for ultrasound data**

(57) An ultrasound system and method of forming an ultrasound data corresponding to a receive scan line independent of a synthetic aperture. The ultrasound system includes the ultrasound data forming unit configured to: form scan line data corresponding to each of the receive scan lines by using data provided from the receive channels; form accumulated data by accumulating the

scan line data corresponding to the receive scan lines of the same position; set a storing start position for storing the accumulated data based on the transmit synthesizing number; and store the accumulated data by shifting the storing start position by 1, thereby forming ultrasound data corresponding to each of the receive scan lines.

FIG. 4



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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)
X	WO 2007/133878 A2 (KONINKL PHILIPS ELECTRONICS NV; COOLEY CLIFFORD [US]; THIELE KARL [US]) 22 November 2007 (2007-11-22) * abstract; figures 1,2,4,5 * * page 5, line 24 - page 8, line 5 * * page 9, line 19 - line 23 * * page 10, line 11 - line 35 * * page 11, line 11 - line 30 * * page 13, line 12 - line 32 * * page 14, line 29 - page 15, line 5 * -----	1-15	INV. A61B8/00 G01S7/52
A	EP 1 980 872 A2 (MEDISON CO LTD [KR]) 15 October 2008 (2008-10-15) * paragraph [0025] * -----	6-9	
			TECHNICAL FIELDS SEARCHED (IPC)
			G01S
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 13 November 2012	Examiner Knoll, Bernhard
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.**

EP 10 16 1314

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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13-11-2012

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 2007133878	A2	22-11-2007	BR PI0711595 A2	16-11-2011
			CN 101442938 A	27-05-2009
			CN 101442939 A	27-05-2009
			CN 101453955 A	10-06-2009
			EP 2019624 A2	04-02-2009
			EP 2019626 A2	04-02-2009
			JP 2009536853 A	22-10-2009
			JP 2009536855 A	22-10-2009
			US 2009069692 A1	12-03-2009
			US 2009182235 A1	16-07-2009
			WO 2007133878 A2	22-11-2007
			WO 2007133881 A2	22-11-2007
EP 1980872	A2	15-10-2008	EP 1980872 A2	15-10-2008
			JP 2008259863 A	30-10-2008
			US 2008255454 A1	16-10-2008

专利名称(译)	用于超声数据的超声系统和方法		
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摘要(译)

一种超声系统和形成对应于独立于合成孔径的接收扫描线的超声数据的方法。超声系统包括超声数据形成单元，被配置为：通过使用从接收通道提供的数据形成与每个接收扫描线对应的扫描线数据；通过累积对应于相同位置的接收扫描线的扫描线数据来形成累积数据；设置存储开始位置，用于根据发送合成数存储累积数据；通过将存储开始位置移动1来存储累积数据，从而形成与每个接收扫描线对应的超声数据。

FIG. 4

