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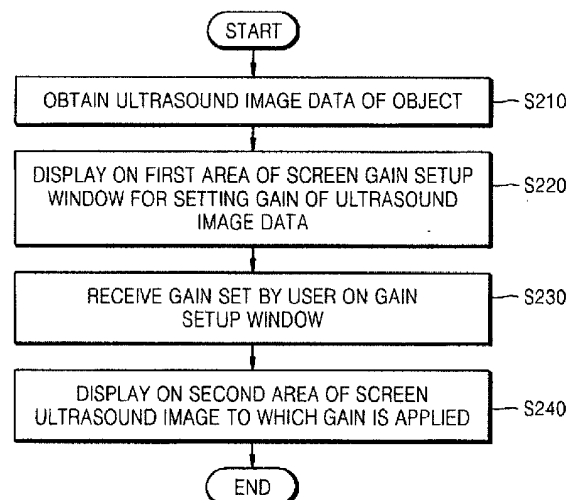
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(54) **ULTRASOUND APPARATUS AND INFORMATION PROVIDING METHOD OF THE ULTRASOUND APPARATUS**

(57) An information providing method which is implementable by using an ultrasound apparatus includes obtaining ultrasound image data which relates to an object; displaying, on a first area of a screen, a gain setup window for setting a gain of the obtained ultrasound image data; receiving a gain which is set by a user on the gain setup window; and displaying, on a second area of the screen, an ultrasound image of the object to which the set gain is applied.

FIG. 2



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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 A	US 6 468 212 B1 (SCOTT WALTER GUY [US] ET AL) 22 October 2002 (2002-10-22) * column 1, line 46 - line 65; claims 1-2; figures 1,2,3a-b,4a-c,7,14,17-19,25 * * gain applied to the image; column 4, line 43 - line 53 * * column 6, line 11 - line 15 * * column 6, line 61 - column 7, line 28 * * column 8, line 37 - line 67 * * page 1, line 8 - line 11 * * column 3, line 58 - column 4, line 31 * -----	1,2,7,8,13 6,12	INV. A61B8/00 G01S7/52
X A	US 2004/015079 A1 (BERGER NOAH [US] ET AL) 22 January 2004 (2004-01-22) * paragraphs [0013], [0020], [0034], [0217], [0265], [0267] - [0268], [0431] - [0437], [0453], [0455]; figures 9,13,15a-b,30,46,47a-b * -----	1-5,7-11,13 6,12	
X	US 5 482 045 A (RUST DAVID W [US] ET AL) 9 January 1996 (1996-01-09) * column 3, line 20 - column 4, line 46; figures 1-5 *	1,2,5-8,11-13	TECHNICAL FIELDS SEARCHED (IPC) A61B G01S
A	US 2009/043195 A1 (POLAND MCKEE D [US]) 12 February 2009 (2009-02-12) * paragraphs [0054] - [0056]; figures 4a-4c *	1-13	
A	JP 2009 178277 A (ALOKA CO LTD) 13 August 2009 (2009-08-13) * abstract; figures 1-3 * * paragraphs [0002], [0005], [0011], [0012], [0017], [0027] - [0034], [0039] - [0046] * -----	1-13	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 5 June 2019	Examiner Daoukou, Eleni
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			

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

EP 18 00 0846

5 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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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6468212 B1	22-10-2002	NONE	
US 2004015079 A1	22-01-2004	US 2004015079 A1 US 2014051984 A1	22-01-2004 20-02-2014
US 5482045 A	09-01-1996	AT 189315 T DE 69514749 D1 DE 69514749 T2 EP 0707221 A1 JP H08206112 A US 5482045 A	15-02-2000 02-03-2000 17-08-2000 17-04-1996 13-08-1996 09-01-1996
US 2009043195 A1	12-02-2009	CN 101040245 A EP 1817653 A1 JP 2008515583 A US 2009043195 A1 WO 2006040697 A1	19-09-2007 15-08-2007 15-05-2008 12-02-2009 20-04-2006
JP 2009178277 A	13-08-2009	JP 5190276 B2 JP 2009178277 A	24-04-2013 13-08-2009

专利名称(译)	超声设备和超声设备的信息提供方法		
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优先权	1020120105959 2012-09-24 KR 1020130026809 2013-03-13 KR		
其他公开文献	EP3494891A2		
外部链接	Espacenet		

摘要(译)

可通过使用超声设备实现的信息提供方法包括获得与对象有关的超声图像数据;在屏幕的第一区域上显示增益设置窗口,用于设置所获得的超声图像数据的增益;接收用户在增益设置窗口上设置的增益;并且在屏幕的第二区域上显示应用了设置增益的对象的超声图像。

FIG. 2

