

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl. ⁷
A61B 8/00

(11)
(43)

2002 - 0060573
2002 07 18

(21)
(22)

10 - 2001 - 0088786
2001 12 31

(30)

1020010001249

2001 01 10

(KR)

(71)

114

(72)

19 808

521 403 - 1103

(74)

:

(54)

‘ ‘ ‘ ‘

1a .

1b .

2 (delay profile)

.

3 2 ,
.

4 .

5 4 , .

6 2 4 .

7 .

8 , .

9 (edge detection) .

10 .

11

.

12 .

13 .

< >

210, 400 :

240, 430 :

[illegible]

a.

b.

c.

a.

b.

c.

< >

,

,

가 , 가 , 가

,

가

,

가

,

가

2

2 , 4 (V₀, V₁, V₂, V₃) 가 (240)

(10) / (A/D)(20) , (FIFO)(30)

(FIFO₀, FIFO₁, FIFO₂, FIFO₃)(200)

(200) 가 (210)

(210) 가 ,

2 , 4

4 (210) 4 (220) , (FI
FO)(230) . (FIFO)(230)
3 . (D_i) (i) (i) ,
, 4가 . (240)
 . (240)가

2. 가가 . ,
가가 . (ASIC)

(10), / (20) (FIFO)(30) 2
 (30) , 1
 (400) (FIFO)(420)
 (FIFO)(30) , 2
 (FIFO)(420)
 (FIFO)(420)

5 4 , (FIFO)(510)
4 . 3 , 4
(410) , (410) (400)
(430) , 가 (400) 가
(FIFO)(420)
2 ,

2 4 (230, 430)

10 (240, 430) 가 (, " ") . , 6

6 2 4 , (240, 430) (240, 430)
 (2 4
)
 , (240, 430)
 , ,

(600)

(610) (610) (600)
 (610) (620) (600)
 (610)

(600)

1

$$\overline{B} = \frac{\sum B''(x, y)}{N}$$

1 B(x, y) (x, y) (x, y)
 . N

(blurring)

7

(700) (automatic gain control) (710)
 (contrast) (median filter)
 가

(710) (720) (720) (720)

(730) (720) (730) (730) (730)

2

$$\overline{F} = \frac{\int^S F(x, y)}{S}$$

(x, y), F(x, y), S

(610) (620)

1 2

(610) (edge detection)

8 2 4 가 , 8 4

0) , 4 (800) 1 2 (800)

8 , (V₀) 가 1 2 가 (800)

0) 1 1 2 (800) 1 (810) 2 (820) (800)

1 1 (810) 2 (820) 1

2 2 (810, 820) 1 8

1 (810) (V₀) 가 2 (820) (

V₁) 가

2 (820) , 2 (810) , 2 , 1

2 (821, 823) , 1 (V₁)(V₂) 가

8 (810, 820) , 1 (811, 813, 821, 823) , 2 (813) (V₂) 가

(811) (V₁) 가 (800) (V₀) 가 (821) (V₃) 가

9 (edge detection) 9 , 8 가 4 (900)

(900) (910, 920, 930, 940) (900)

(900) 1 2 , 1 2 , 4 (900)

1 2 , (low - pass filter) 가

1 (910) , (930) (900) (920, 940, 950) , 1

1 2 , 1 2 (V₁, V₂, V₃) 가

1 2 , 1 2 , 1

2 , 1 2 , 1

$$\begin{aligned} & \text{1. } \text{1000} \text{ (1010)} \text{ (1030)} \\ & \text{2. } \text{10} \text{ (1030)} \\ & \text{3. } \text{10} \text{ (1030)} \\ & \text{4. } \text{10} \text{ (1030)} \\ & \text{5. } \text{10} \text{ (1030)} \\ & \text{6. } \text{10} \text{ (1030)} \\ & \text{7. } \text{10} \text{ (1030)} \\ & \text{8. } \text{10} \text{ (1030)} \\ & \text{9. } \text{10} \text{ (1030)} \\ & \text{10. } \text{10} \text{ (1030)} \end{aligned}$$

1a

1a (1)

가 (1)

1b

1b

(40)

9

6

가

3

1/3

2 4

(10) (10)

가

11

11

(3a ~ 3c) (7)

1a (5)

(1) (3)

3 (1a ~ 1c)

(3a ~ 3c) (1) (13) 가

가

11 가

V1~V3

V1~V3

가

(3)

가 (1a ~ 1c) 가

3 (7)
 (3a~3c)
 (f1~f3)
 가 가
 (3a ~ 3c)
 가 (f1 ~ f3)
 (7)
 가 가 (7)
 (Golay code))
 (3a ~ 3c)
 가 가 (7)
 12 11
 (1210)
 12 11 3 (10)
 (1230a ~ 1230c)
 , 3 (1230a ~ 1230c) 가
 (3)
 (3)
 11 12
 (1240)
 (1240) 6 9 가
 13 11
 (10) 12 (1230)
 가 가 12
 12
 (1240)
 12
 11 13
 가 11 (1)
 (3)

. 12 13 (1230)

8 , 2 4 ,
 , (800) 4 (811, 813, 821, 823)
 , (811) V0
 (813) V1 , (821)
 , V2 , (823) V3
 , 2

9 (920, 940, 950) , (950) (9
 20) , (950)
 , (920) (950)
 V2 , V1
 (940) V3 (920)

< (Multi - beam system) >

가 .
 , 11 . 11
 가 .

12 13 ,

2 4

< >

, 가 .

, 11 , 12 13
 (1210) 2 4
 , 3 , 4
 , 12 가 , 12
 , 6 9

가

가 , .

(57)

1.

,

a. ,

b. ,

c. .

2.

1 , c. ,

d. ,

e. d. ,

f. .

3.

2 , d.

d1) ,

d2) b ,

d3) 가

.

4.

1 ,

b. ,
.

5.

1 ,

b. ,
.

6.

3 ,

d2 d3 ,
.

7.

3 ,

d2 d3 ,
.

8.

3 ,

d1 d3 .

9.

8 ,

, .

10.

2 ,

d. , .

11.

1 ,

.

12.

1 ,

b ,

,

b .

13.

,

a.

,

b.

.

14.

13 , b. ,

c. ,

d. ,

,

e.

.

15.

14 , c.

c1) ,

c2) ,

c3)

.

16.

13 ,

17.

13 ,

18.

15 ,

19.

15 ,

20.

15 ,

21.

15 ,

22.

23.

22

24.

22

25.

26.

27.

28.

29.

28 ,

30.

28 ,

31.

28 30 ,

,

,

,

32.

,

,

,

33.

32 ,

34.

32 ,

35.

32

34

,

,

,

,

,

.

36.

32

34

,

,

,

.

37.

32

34

,

,

,

,

,

.

38.

36

,

,

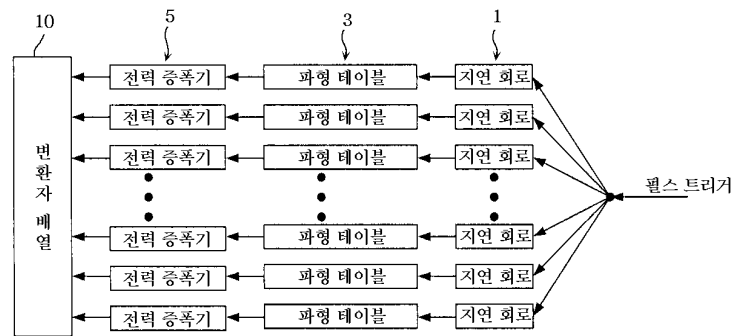
,

,

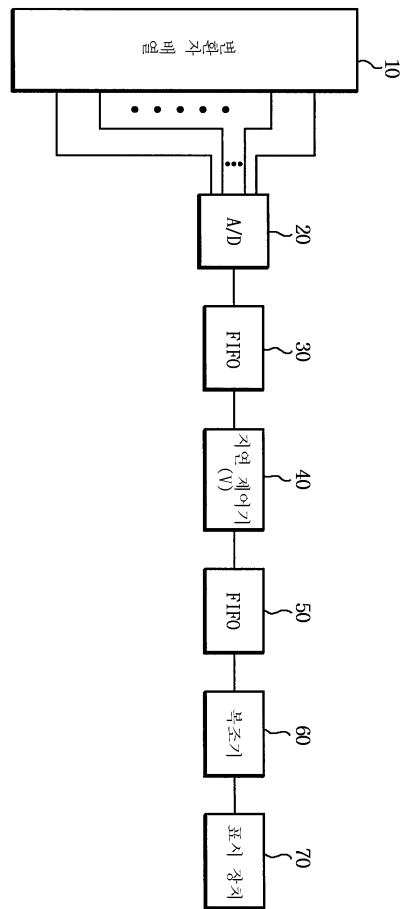
.

39.

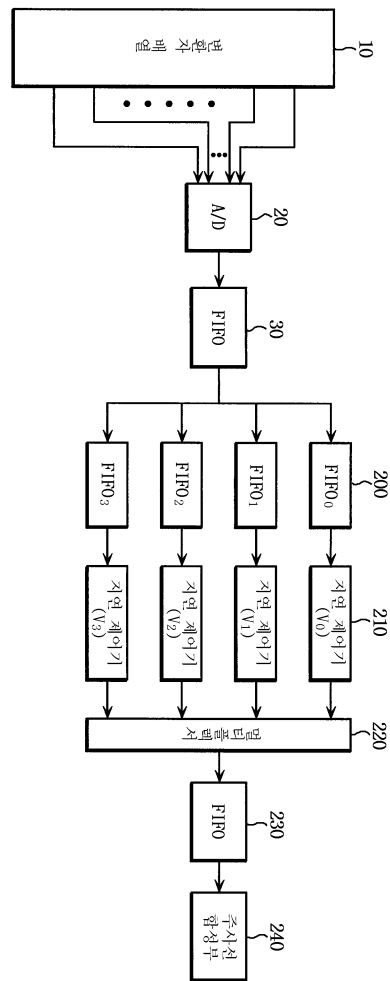
1a



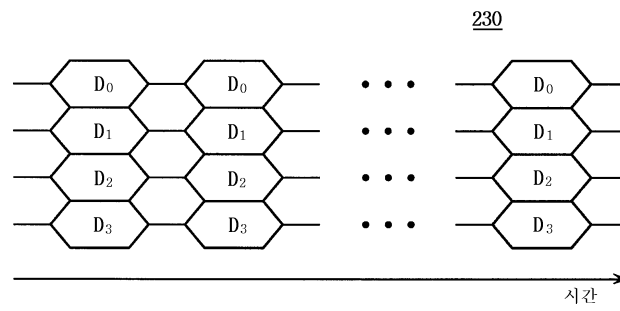
1b



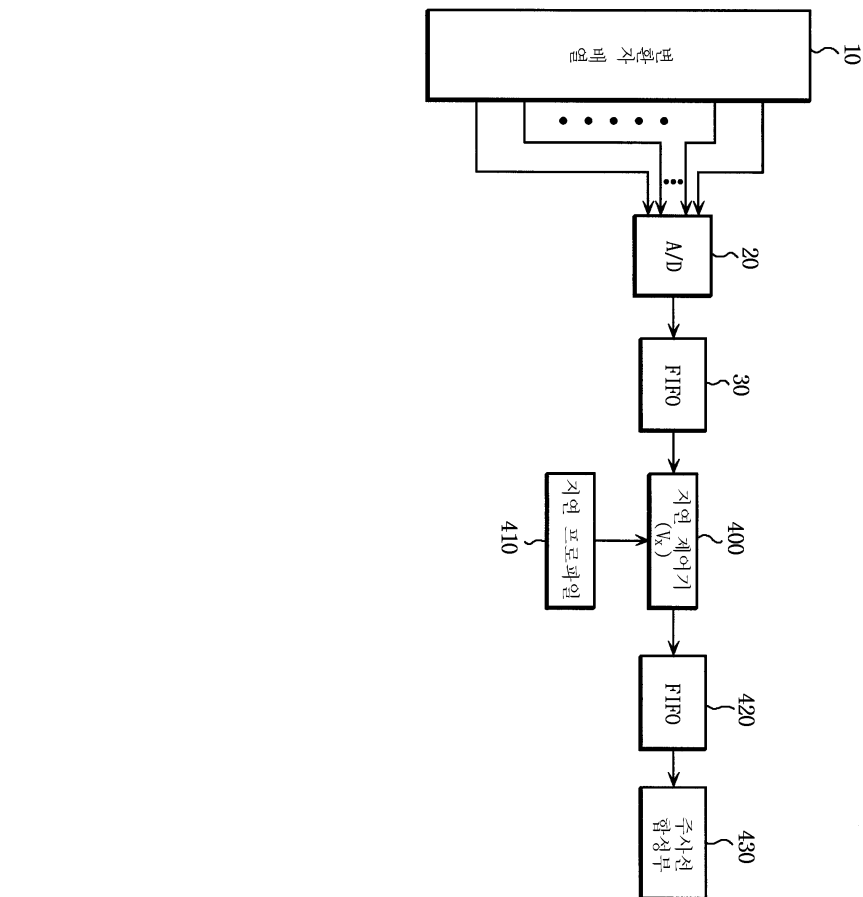
2



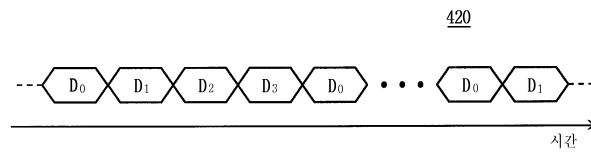
3



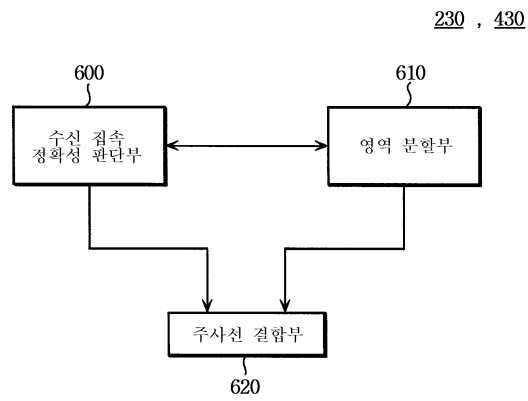
4



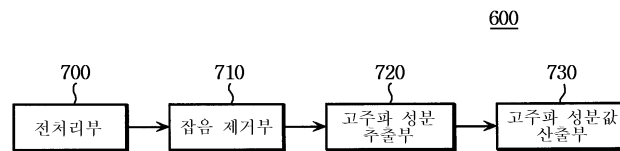
5



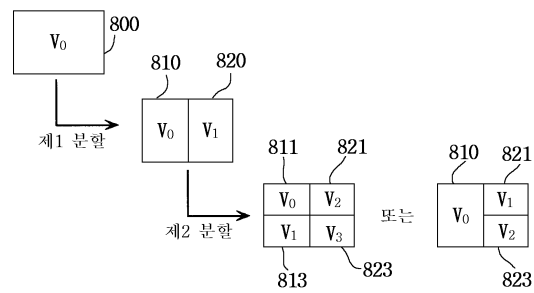
6



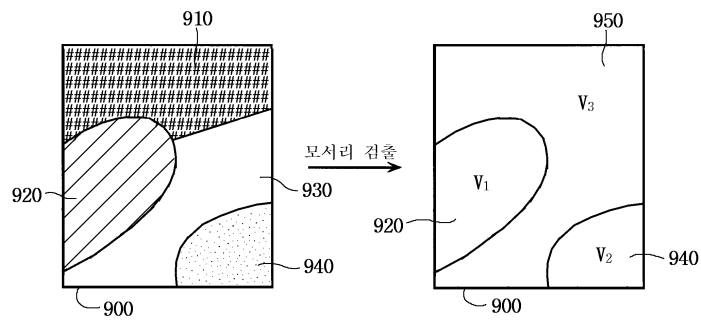
7



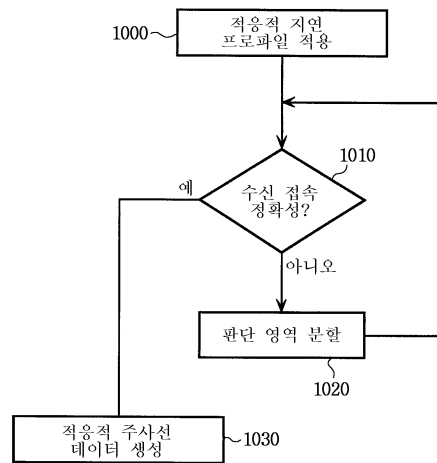
8



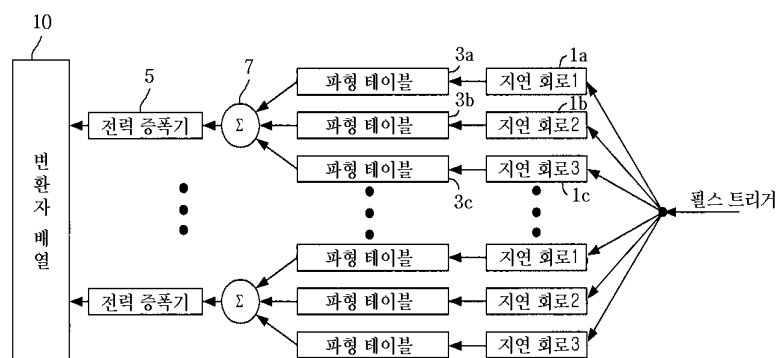
9



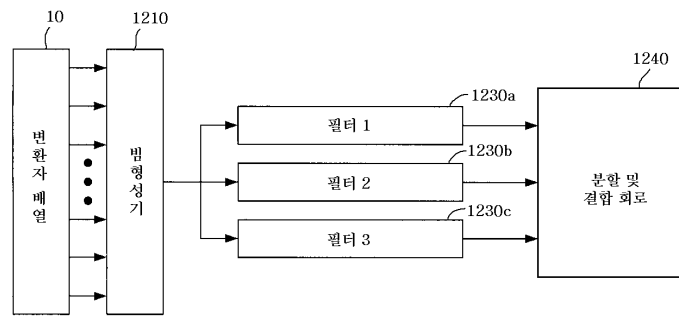
10



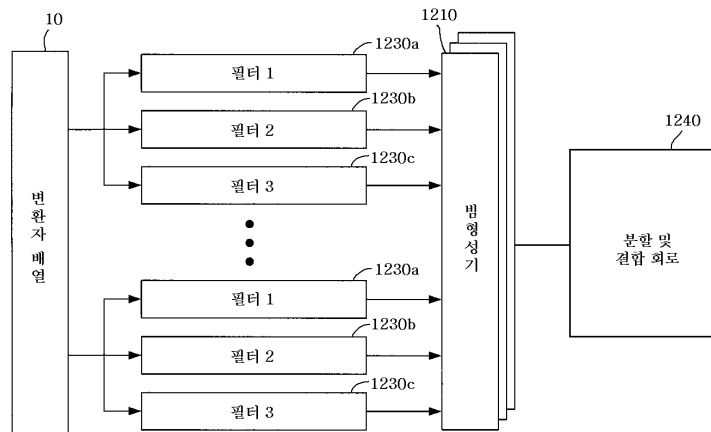
11



12



13



专利名称(译)	发送和接收聚焦装置和形成自适应扫描线数据的方法		
公开(公告)号	KR1020020060573A	公开(公告)日	2002-07-18
申请号	KR1020010088786	申请日	2001-12-31
[标]申请(专利权)人(译)	三星麦迪森株式会社		
申请(专利权)人(译)	三星麦迪逊有限公司		
当前申请(专利权)人(译)	三星麦迪逊有限公司		
[标]发明人	BAE MOOHO 배무호 HONG JAEBUM 홍재범		
发明人	배무호 홍재범		
IPC分类号	A61B8/00		
代理人(译)	CHANG, SOO KIL CHU, 晟敏		
优先权	1020010001249 2001-01-10 KR		
其他公开文献	KR100441067B1		
外部链接	Espacenet		

摘要(译)

自适应发送聚焦和接收聚焦方法和装置技术领域根据本发明的接收聚焦包括通过将自适应延迟分布应用于从一组超声脉冲反射并由换能器阵列接收的超声信号来接收和聚焦多个初步扫描线数据，并生成单个扫描线数据。根据本发明的自适应传输聚焦的特征在于，根据超声波在要形成超声图像的目标区域中的传播速度来应用多个延迟分布。因此，当在本发明的结构，它使用一个单一的延迟分布时是可能的，因此能够减少在发射聚焦错误和接收聚焦，其改变特性产生介质来实现的反射介质的清晰的超声波图像特性。

2 指数方面 - 1 - 超声成像系统，自适应发射聚焦，自适应接收聚焦，延迟分布，

