

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl.⁷
G09G 3/36

(11)
(43)

10-2004-0073267
2004 08 19

(21)

10-2003-0092800

(22)

2003 12 18

(30)

JP-P-2003-00035681 2003 02 13

(JP)

(71)

가 가

2 2 3

(72)

2 2 3 가 가

2 2 3 가 가

2 2 3 가 가

(74)

:

(54)

· , , 1
가 1 가 , ,
가 1 , ,

1
1 1 ,
2 1 ,

3	1				,
4	1		(10)		,
5	1	LUT			,
6		가			,
7					,
8					,
9					,
10					,
11	1				,
12					,
13	1				,
14	1	LUT	LUT		,
15				1	,
16				1	,
17	2				,
18	2	LUT			,
19	2				.

-
- 1 : 2 :
3 : 4 :
5 : 6 : 1
7 : 2 8 :
9 : 10 :
11 :

(1)

1 1

(1) (2)

(2) (,) Di1

(3) Di1 (3)

(3) Di1 Dj1 (11)

1 (11)가 Dj1

1 (3)

(2) (3) (4) (5)

1 (6) (4) (4) (5)

(BTC) , JPEG 2 , Di1 (4) , FBTC GBTC , JPEG2000

가 , 가 ,

가

(4) 1 Da1 (5) 1

) (, 2 Da0 2 (7) (5)

(4) 1 1 Da1 (6) 1 Da1

1 Db1 (8)

(5) 2 2 Da0 (7) 2 Da0

(8) 2 1 (6) Db1 , 2 (7)

Dv1 2 Db0 1 Dv1 Db1 (9) , Dv1

Db1 (11) 2 Db0

(9) (8) Dv1 Di1

Dp0 (10)

1 Db1 Dp0 (8) Dv1 2 Db0

Dv1 1 Db1 Dv1 2 Db0 Di1 가

Di1 Dv1 가 , Dp

0 1

(10) Di1, (8) Dv1 (9)
 Di1 Dp0 , Dj1 (11) ,
 , 1 가 ,
 2 Dp0 1
 2 , (a) Di0 , (d) Di1 .
 , (b) Di0 2 Da0 , (e)
 Di1 1 Da1 , (b) (e) FTBC
 (La, Lb) 8 1 .
 , (c) 2 Da0 2 Db0 , (f) 1
 Da1 1 Db1 .
 , (g) (c) Dv1 2 , (h) Db0 (f) 1 Db1
 Dv1 , (h) (9) (14)
 Dp0 .
 2 , (a) (c) , (d) (f) 가 1 Db1 2 D
 b0 2 Db0 Dv1((g)) 1 Di1 Db1,
 Dp0((h)) , Dp0
 1 , 2 (a) (h) Di0 .
 (3) , 3 Di1 가 , 1 St1
 (4) (5) 1 Da1 , (5)
 2 St2() , (5) 1 Da1 , (5)
 2 Da0 .
 3 St3() , 1 Da1 1 (6)
 1 Db1 , 2 Da0 2 (7) , 2 ,
 Db0 .
 4 St4() , 1 Db1 2 Db0
 (8) Dv1 .
 5 St5() , (9)
 Dp0 .
 6 St6() , (10) Di1 ,
 Dj1 (11) .
 , 1 St1 6 St6 (11)
 .
 4 (10) , (10) .
 (8) Di1, (9) Dp0, (30)
 Dv1 (30)
 Di1, Dm1 (15) . Dp0 Dv1

Di1 (15) , Dm1 Dj1 Di1 가 (11) .
 , (10) (30) .
 (12)((30) , LUT) Di1 Dp0
 LUT(12) (13) , LUT Di1 Dj2 (11) Dp0 1 , LUT Dj2
 , LUT(12) . 5 LUT(12) LUT Dj2 , LUT LU
 (12) T Dj2 (11)가 (16×16) LUT Dj2가 LUT(12) , 10 (11) (1024×
 1024) LUT Dj2가 , 5 (11) 가 8
 , 5 , Di1 Dp0 8
 , 0 255 , LUT(12) , 5 Dp0 2 , L
 (256×256) , Di1
 UT Dj2 5 , Di1 a, LUT Dj2가
 Dp0 b , LUT(12) 5
 , LUT Dj2 .
 (11) 가 8 (0 255) , 가 (11) V50
 1/2 (127) , 50%가 3/4 (191)
 가 , 75%가 V75가 가 .
 6 0% , V50 가 V75 가 ,
 6 , 1 , 1 가 ,
 , 6 , V75 가 1 가 50%가
 50% , , V75 , 1 (11) 가 (11)
 (0%) 1/2 (50%) , 3/
 4 (75%) 가 가 D
 i1 1 가 .
 7 ,
 7 , x Di1 , y Di0 가 (11)
 , z 1 , 7
 1 가 8 (256×256) ,
 (8×8) .
 , 8 , x
 Di1 , y 1
 Di0 , z (11) 1
 가 ,

, 8 (11) 가 8 , 7 가 ,
 (8×8) .
 8 가 , 7 , (가 ,)
 .
 가 LUT Dj2 LUT(12) . , 6 가 , 가
 0% 50%
 , 1/2 가 3/4
 , 3/4
 가 0 1/2 가 LUT Dj2 .
 9 LUT(12) LUT Dj2 , LUT Dj2 (11)
 LUT Dj2가 0 255 (11) 가 8
 1 가 LUT Dj2
 .
 , LUT Dj2 LUT(12) LUT Dj2 , 4 (13
) LUT Dj2 Di1 Dk1
 (14) .
 (14) Th (8) Dv1
 Th (14) Dk1 , D
 m1 (15) , (1), (2) Dm1 .

$$D_{m1} = k \times D_{k1} \quad (1)$$

$$k = f(Th, Dv1) \quad (2)$$
 단, $0 \leq k \leq 1$
 , $k = f(Th, Dv1)$ Dv1=0 0 , k (2)
 , 10 , (11)
 Dv1 k , Th ,
 , 10 ,
 , Dv1 , (Di1-Dp0)
 Dk1 가 .
 , LUT LUT Di1 Dp0
 , Di1, Dp0
 (30) 11 가 .
 11 , Di1 (20) , (20) (21)
) (,)가
 .
 (20) Di1 w) LUT(12) .
 (,
 , (11) 1/2 가 , (20) ,
 w 12 .
 12 , 가 1/
 2, 1, 1/4 , , 1
 , 8 , 255) , 0 (, 8 0)
 .

[illegible]

$$, \quad Dv1 \quad Th \quad , \quad Dk1 \quad , \quad (11)$$

16 (a) D_{i1} (b) D_{j1} (c) D_{j1}

가 . , , 16(a) m, (m+1), (m+2) , Dk1
 Di1 , Dj1(, Dk1
 n1, n2, n3)

16(a) m , $(m+1)$, $(m+2)$

(c) Di1, (b) 가 , 가 .

[illegible]

1 Di1

Di1

$$\begin{aligned} & \text{Di1} \\ & \text{Dj1} \end{aligned} \quad (4) \quad \text{Di1} \quad (5)$$

Figure 10: Example of a 12-bit LUT (Look-Up Table) with 10 inputs and 1 output. The LUT is represented as a table with 10 columns (inputs) and 1 row (output). The inputs are labeled Dj2, LUT(12), (10), Di1, Di1, 가, Dp0, (10)가, Dj1, and Dj1. The output is labeled LUT. The LUT is shown as a table with 10 columns and 1 row, with the output value being 1.

(2)

1, LUT(12) 가 8, LUT(12) 2 LUT(12)

17 (10) 2 (10) 1 가 . , 17 1

$$17 \quad , \quad \text{Di1}, \quad \text{Dp0} \quad \text{Dv1} \quad 2 \quad \text{Di1} \quad (10) \quad (31) \quad . \quad , \quad (15) \quad . \quad ($$
$$\text{Dv1} \quad (31) \quad \text{Dm1} \quad (15) \quad \text{Di1}, \quad \text{Dp0}$$

(15) Di1 Dm1 , Dj1 (11)

(31)

(31) Di1 1 (16) , 2

Dp0 2 (17) , 1 Di1

Dp0 가 .

1 (16) Di1 1 De1

LUT(18) 2 , 2 (17) Dp0 Di

1 2 De0 LUT(18) 3 . ,

1 k1 (16) 1 k0 (19) 2 , 2 k0 (17) 2

(19) , 1 k1 2 k0 (19)

LUT(18) 1 De1 2 De0 , 1 LUT Df1, 1 LU

2 LUT Df2, 3 LUT Df3 4 LUT Df4 (19) , ,

T Df1, 2 LUT Df2, 3 LUT Df3 4 LUT Df4 LUT

18 De1 17 LUT(18) De2 , 1 LUT Df1 , 18

2 , 1 De1 a , 2 De2가 b

(二重丸) 가 1 LUT Df1 .

De1 LUT Df1 LUT 가 2 LUT Df2

De0 LUT Df1 LUT 가 3 LUT D D

f3 LUT 3 LUT Df3 De1 LUT 가 LUT 가 4

, LUT(18)가 12 (9×9) LUT 1 De1 2

De0 3 0 7 , 2 LUT

Df2 .

17 (19) , , LUT(18) LUT , 1

1 ko, 2 LUT , 2 k1

Dj3 (13) .

(19) Dj3 LUT , (3)

Dj3 = (1-k0) × { (1-k1) × Df1 + k1 × Df2 }
+ k0 × { (1-k1) × Df3 + k1 × Df4 } (3)

, 19 (3) .

19 Dfa 1 LUT Df1 2 LUT Df2 1

(4) .

Dfa = Df1 + k1 × (Df2 - Df1)
= (1-k1) × Df1 + k1 × Df2 (4)

, 19 Dfb 3 LUT Df3 4 LUT 2

(5) .

$$Dfb = Df3 + k1 \times (Df4 - Df3) \\ = (1 - k1) \times Df3 + k1 \times Df4 \quad (5)$$

$$Dj3 = Dfa + k0 \times (Dfb - Dfa)$$

$$= (1 - k0) \times Dfa + k0 \times Dfb \\ = (1 - k0) \times \{ (1 - k1) \times Df1 + k1 \times Df2 \} \\ + k0 \times \{ (1 - k1) \times Df3 + k1 \times Df4 \}$$

$$Dj3 = (1 - k0) \times \{ (1 - k1) \times Df1 + k1 \times Df2 \} + k0 \times \{ (1 - k1) \times Df3 + k1 \times Df4 \} \quad (16)$$

$$Dj3 = (1 - k0) \times \{ (1 - k1) \times Df1 + k1 \times Df2 \} + k0 \times \{ (1 - k1) \times Df3 + k1 \times Df4 \} \quad (17)$$

$$Dj3 = (1 - k0) \times \{ (1 - k1) \times Df1 + k1 \times Df2 \} + k0 \times \{ (1 - k1) \times Df3 + k1 \times Df4 \} \quad (6), (7)$$

$$k1 = (Db1 - s1) / (s2 - s1) \quad (6)$$

$$\text{단, } s1 < Db1 \leq s2$$

$$k0 = (Db0 - s3) / (s4 - s3) \quad (7)$$

$$\text{단, } s3 < Db0 \leq s4$$

$$Dj3 = (1 - k0) \times \{ (1 - k1) \times Df1 + k1 \times Df2 \} + k0 \times \{ (1 - k1) \times Df3 + k1 \times Df4 \} \quad (13)$$

$$Dj3 = (1 - k0) \times \{ (1 - k1) \times Df1 + k1 \times Df2 \} + k0 \times \{ (1 - k1) \times Df3 + k1 \times Df4 \} \quad (16), (17)$$

$$Dj3 = (1 - k0) \times \{ (1 - k1) \times Df1 + k1 \times Df2 \} + k0 \times \{ (1 - k1) \times Df3 + k1 \times Df4 \} \quad (19)$$

$$Dj3 = (1 - k0) \times \{ (1 - k1) \times Df1 + k1 \times Df2 \} + k0 \times \{ (1 - k1) \times Df3 + k1 \times Df4 \} \quad (16), (17)$$

$$Dj3 = (1 - k0) \times \{ (1 - k1) \times Df1 + k1 \times Df2 \} + k0 \times \{ (1 - k1) \times Df3 + k1 \times Df4 \} \quad (14)$$

$$Dj3 = (1 - k0) \times \{ (1 - k1) \times Df1 + k1 \times Df2 \} + k0 \times \{ (1 - k1) \times Df3 + k1 \times Df4 \} \quad (14)$$

$$\text{Di1} \quad (19)$$

가

Dj3

가

$$, \quad \begin{matrix} 1 & 2 \\ & \end{matrix} \quad (\quad , \quad)$$

가 가 .

(57)

1.

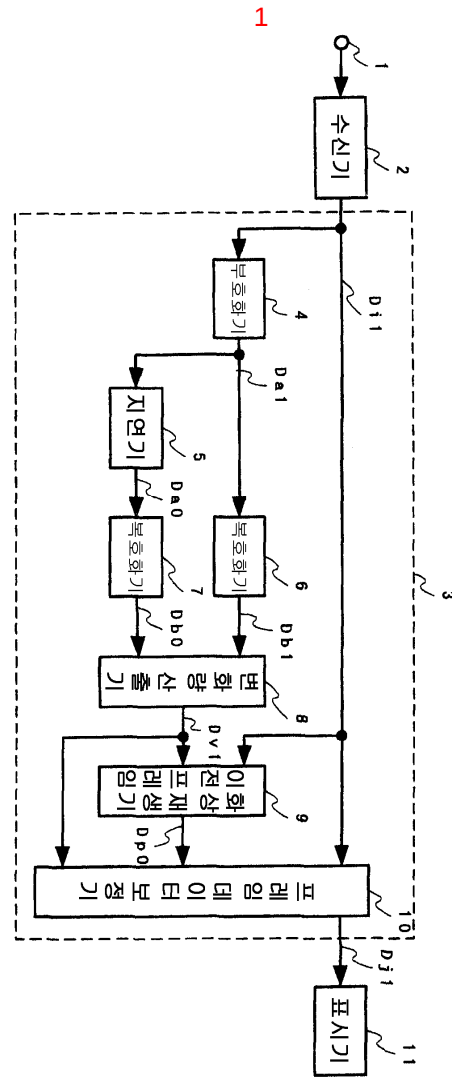
1

2.

1

3.

1



n 프레임

	A	B	C	D
a	52	152	52	52
b	52	152	52	52
c	48	148	48	48
d	48	148	48	48

La=100 Lb=100

	A	B	C	D
a	50	150	50	50
b	50	150	50	50
c	50	150	50	50
d	50	50	50	50

	A	B	C	D
a	0	0	0	0
b	0	0	0	0
c	0	0	0	0
d	0	0	0	0

	A	B	C	D
a	52	152	52	52
b	52	152	52	52
c	48	148	48	48
d	48	148	48	48

2

(a)

(b)

(c)

(d)

(h)

n+1 프레임

	A	B	C	D
a	52	152	52	52
b	52	152	52	52
c	48	148	48	48
d	48	148	48	48

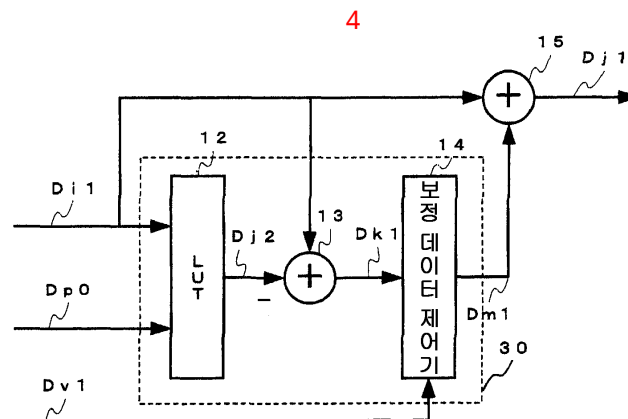
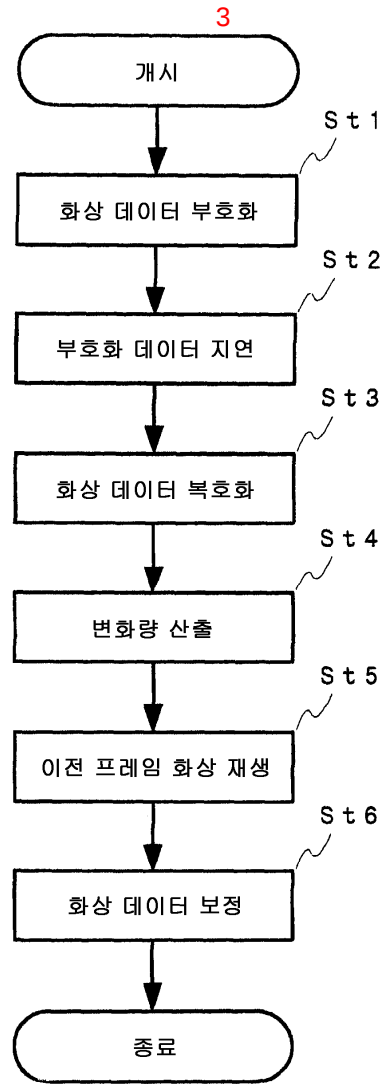
La=100 Lb=100

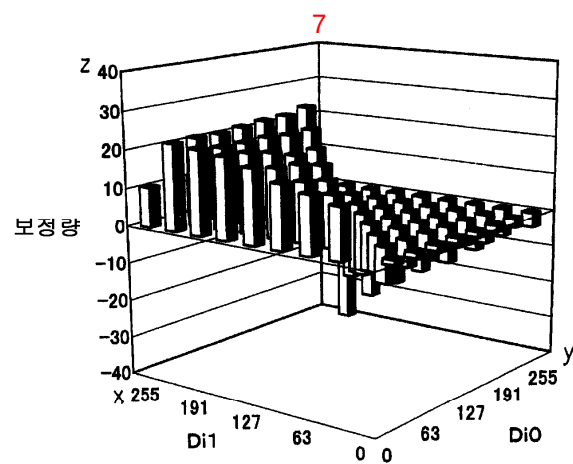
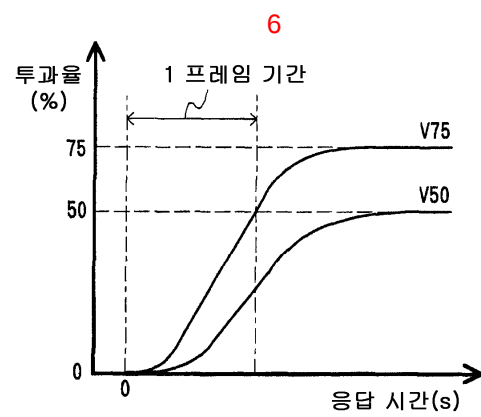
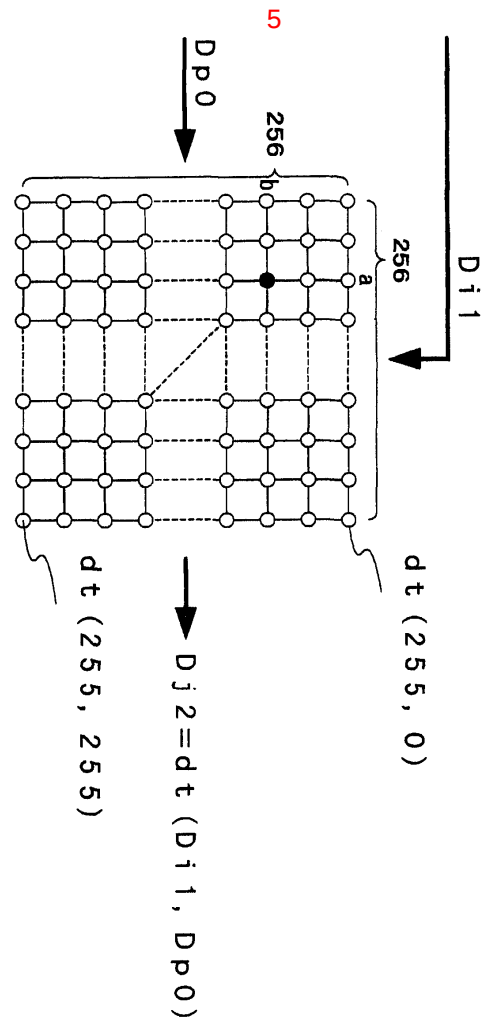
	A	B	C	D
a	50	150	50	50
b	50	150	50	50
c	50	150	50	50
d	50	150	50	50

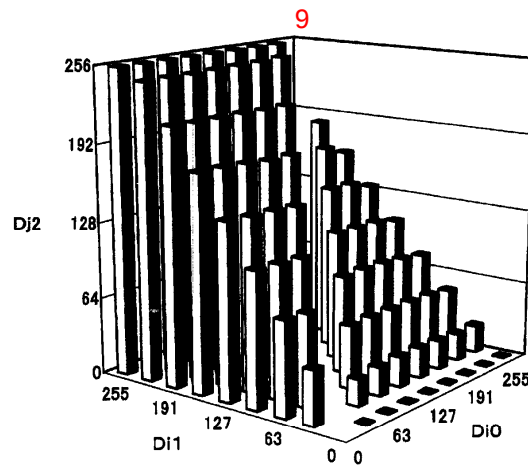
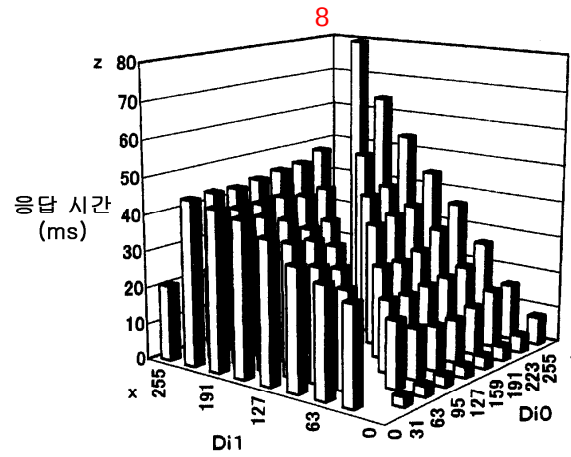
(d)

(e)

(f)







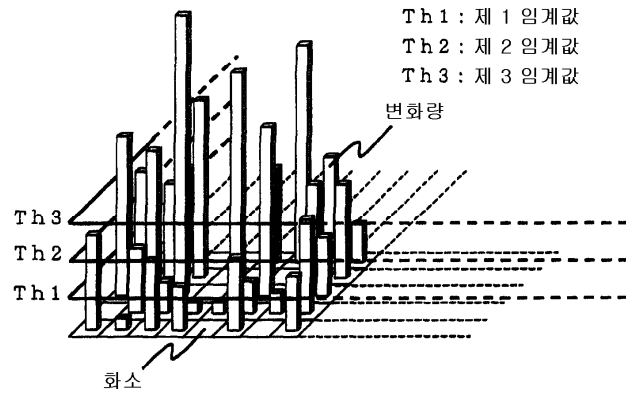
10

$0 < Dv1 < Th1 \Rightarrow k0$ 을 출력
 $Th1 \leq Dv1 < Th2 \Rightarrow k1$ 을 출력
 $Th2 \leq Dv1 < Th3 \Rightarrow k2$ 을 출력

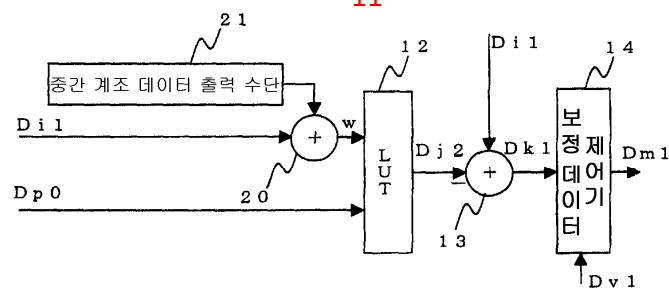
Th1 : 제 1 임계값

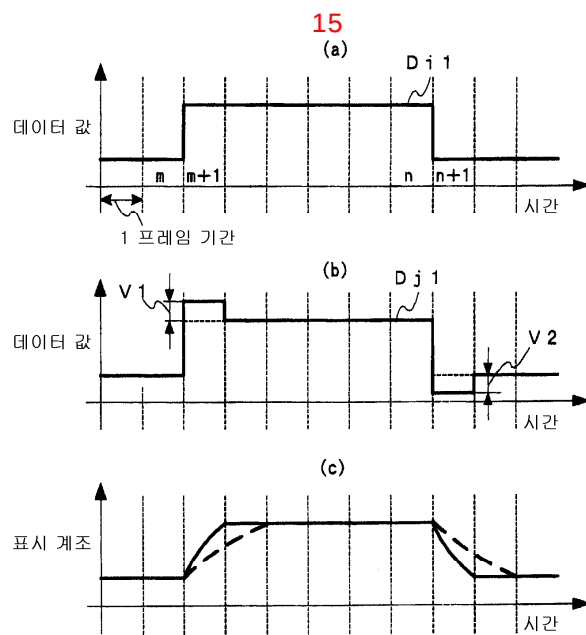
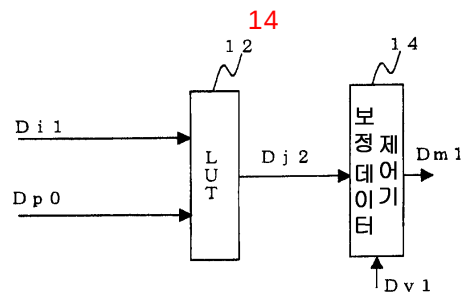
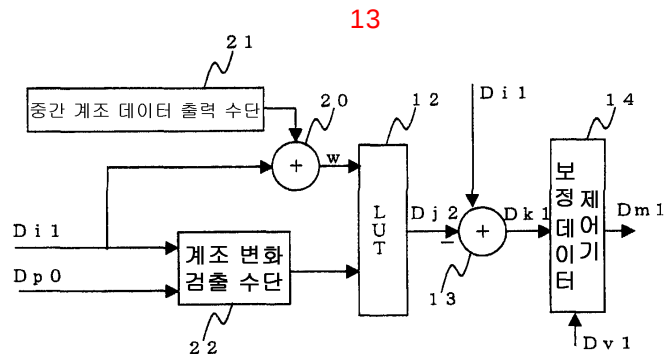
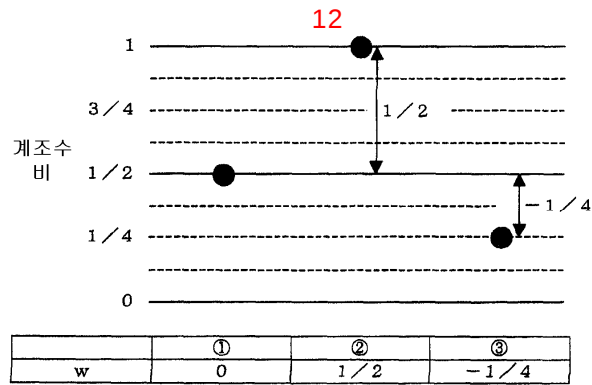
Th2 : 제 2 임계값

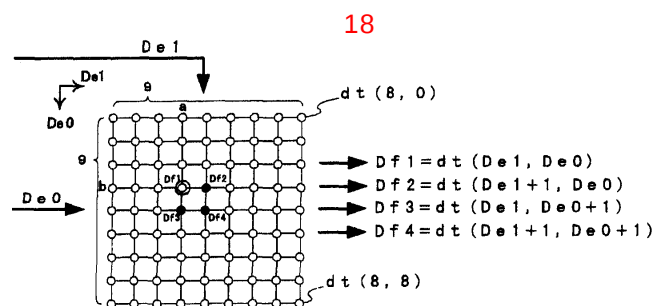
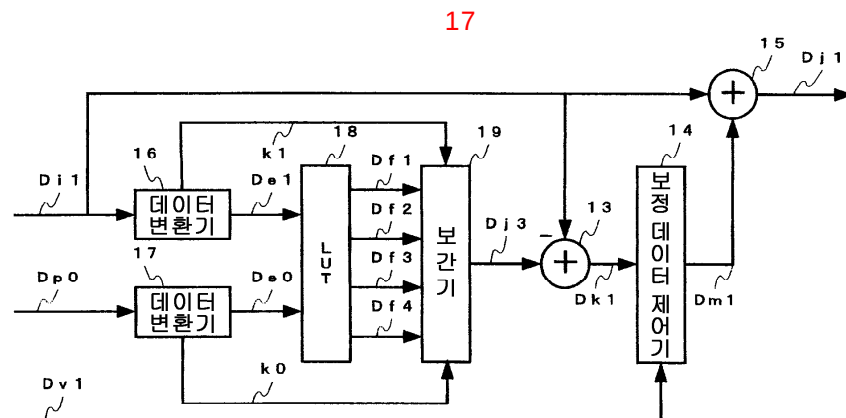
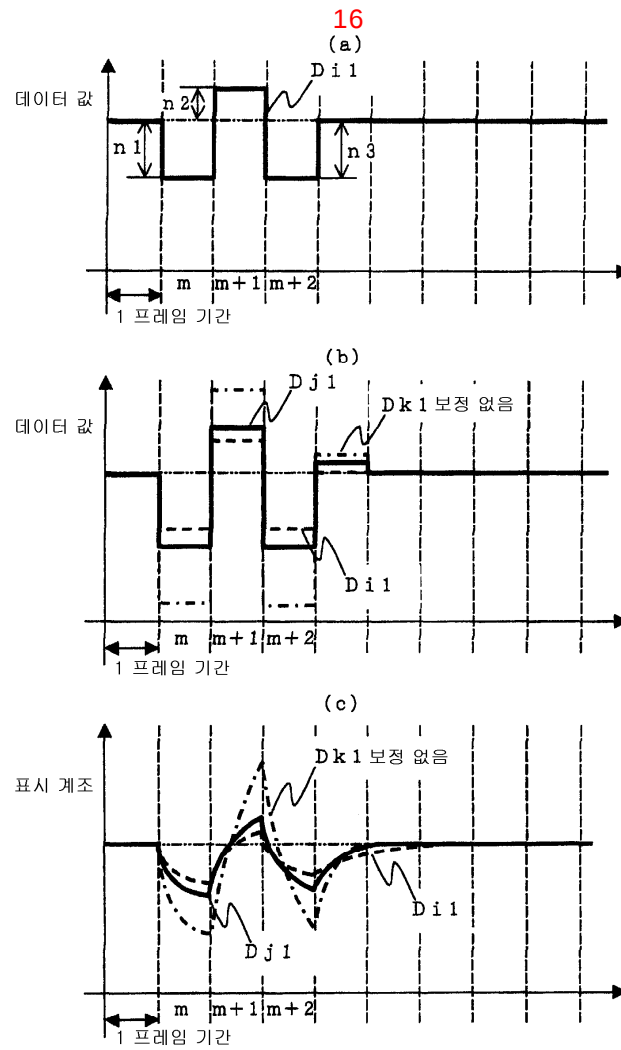
Th3 : 제 3 임계값

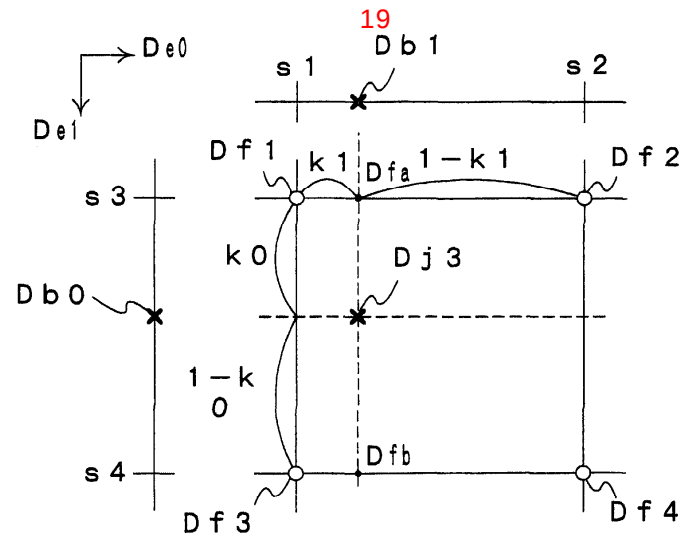


11









专利名称(译)	校正数据输出装置和校正数据校正方法		
公开(公告)号	KR1020040073267A	公开(公告)日	2004-08-19
申请号	KR1020030092800	申请日	2003-12-18
[标]申请(专利权)人(译)	三菱电机株式会社		
申请(专利权)人(译)	三菱电机有限公司		
当前申请(专利权)人(译)	三菱电机有限公司		
[标]发明人	OKUDA NORITAKA 오쿠다노리타카 SOMEYA JUN 소메야준 YAMAKAWA MASAKI 야마카와마사키		
发明人	오쿠다노리타카 소메야준 야마카와마사키		
IPC分类号	G09G3/36 G09G5/00 G03F3/08 G06F15/00 G09G3/20 H04N5/66 G02F1/133 H04N1/46		
CPC分类号	G09G2340/16 G09G2320/02 G09G3/3611 G09G2320/0285		
代理人(译)	KIM, CHANG SE		
优先权	2003035681 2003-02-13 JP		
其他公开文献	KR100595087B1		
外部链接	Espacenet		

摘要(译)

在本发明的液晶面板中，液体驱动电压比正常驱动电压大很多，可以提高液晶的响应速度。但是对应于噪声分量的液体驱动电压if if是基于帧的1帧之前的相应帧的比例数，其经历表示的帧的比例数并且表示并且增加和减少液体驱动电压是微小的增加和减少。因此，根据与经历和指示的帧的1帧前帧的帧相对应的帧数据的变化量和与所表示的帧相对应的帧数据，以防止在所指示的帧的图像质量中发生劣化，指示器处的灰度变化速度尽可能快地修正帧数据。

