

(19)
(12)

(KR)
(A)

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(11)
(43)

2001 - 0062355
2001 07 07

(21) 10 - 2000 - 0075606
(22) 2000 12 12

(30) 99 - 354206 1999 12 14 (JP)

(71) 가 가
가 가 가 가 4 1 - 1

(72) 가 가 가 가 가 4 - 1 - 1 가 가
가 가 가 가 가 4 - 1 - 1 가 가

(74)

:

(54) ,

(41) , 2 2 가
(43) (44) 가
(FLK)

11

,

1

2

3a 1

, 3b 2

4a 1

(flicker)가

, 4b

1 가

5a 5b 1

가 , 2

가

6a 6b 2

가 , 2

가

7 1

가

8

9

10

11

12

13 3

14 2

15

16

17

18 (階調差)

19 (OB)

20 (EB) .
21 .
22 .
23 .
24 .
25 .
26 .
27 9 (2).
28 8 .
29 .
30 6 (3).
31 .
32 (4).
33 () .
34 .

*

10 : 11 :

12 : 13 :

14 : 15 :

20 : TFT 21, 31 :

22 : 23 :

24 : 25 : TFT

30 : 32 :

34 : 40 :

41 : 42 :

43 : 44 :

45 : 46 :

47 : 48 :

49 : 51 :

52 : 53 :

54 : 55 :

56 : D/A

57 : (voltage - follower部)

가

, ,
, .

2

(封入)

가

(Thin Film Transistor : , TFT

)가 가 .

. 2 ,
(R), (G), (B) 3 ,
, TFT TFT

R · G · B 가 .

TFT

) 가 , (+) 가 (-) 가 (.
가 , 가 , 가 , 가 , 가
(flicker) , 가 , 가 .

가
75448 , 62 - 113129 , 2 - 34818 , 6 - 149174 , 7 - 1
9 - 204159

가 , 가 , 가 , 가
가 , 가 , 가 , 가
가

(checker pattern) 가 가

5 - 297831 , 8 - 69264 11 - 95725 ,
2 가 가 ,

(13) , 8 (11) , 2
(同色) (RGB) (RGB) (12) , (11)
(RGB) (FLK) (FLK) (14) (13)

가 , 2 가 , 2 가 2
가 , 가 , 가
() 가

가 2 가 2

가 1

가

(誤)

가

가 12 가 1

가 (S14), (S15), 가 (S12a), 가 2 1 2

가 (S18), (S20)

가 8 11

(11) 2

(FLK) (12) (11) (RGB) (FLK) (14)

2
 , 가 , 2 1
 , 가 ,
 ,
 ,
 ,
 , 1a 가 , 가
 , 가 , 1b V- V, 가 V+ V . 2 가 V
 + V V- V ,
 3 2 , 3a 1 ,
 3b 2 가 . 3a 1 ,
 2 , 가 1 가 , 3b 2
 2 가 . 가 1
 4 1 가 , 가
 , 가 () 가
 , 가
 4a , 가 , 1 가
 , 4b , 가 , 가 ,
 1 ,
 5a 2 1 가 , 5b 가
 (混在) , 6a 1
 가 , 6b 2

, 가 가 .

, 가 () . 가 G(), R(), B()
 , G 가 7 , 7 1 2
 (6) , OR, OG OB (,) R , G B
 B , ER, EG EB (,) R , G B

, 1 (, 1) 가 , 2 (, 2) . , 2 가
 , 1 가 , 1 가 ,

, 가 , 가
 , 33a , 125 , 32 () , 20 가 가
 , 33b 가 , 33 가 가
 가 , 250 가 , 가

, 34 , 가 32 , 34a ,
 20 , 가 , 125 가 ,
 , 34b 가 , 33 가 , 250 가
 가 , 가

(1)

(1)

8 1 (10) (11) ,
 (13) , (14) , (15) . , (11)
 (12)가 .

(11) (, (RGB))(19) , (19)
) (H - sync), (V - sync), (DCLK) (RGB) .

3 (RGB) (, R · G · B R , G B
) R · G · B (DCLK)

(11) R · G · B (serial) - (parallel) R() , G()
 B() (H - sync), (V - sync) (DCLK) , (11)
 (DSTIN), 1 (GSTR)
 (H - sync) (GCLK) .

(12) R · G · B , ,
 (FLK) H" L" (12) .

DCLK) (14) (11) R · G · B , (DSTIN) (
 (FLK) (13) , (14) (12) R · G · B
 (14)

(15) (11) (GSTR) (GCLK)
 , (13)

), TFT (14) (15) (13)
) TFT 가 .

, TV (10) (37)
 R · G · B , (H - sync), (V - sync) 가 ,
 가 ,

(2)

9 , 10 TFT

(13) TFT (20) (30) , TFT (20) (30)
 (39)

TFT (20) (21) , (21) (22), (23),
 (24) TFT(25) (22) (23)
 , () (22)
 (23)

(22) (23)
 (indium - tin oxide : , ITO) (24) , TFT(25)
 (22) (22a) , (22a) ()
 (26) , (26) (23a) (23b)
 (23a) (23) , (23b) (24)
 (24) , ()

(24) , (27) (27)
 가 , 가
 (rubbing)

(30) (31) , (31) (32), (33),
 (34) (35) (32) (R), (G) (B) 3 가
 , 1 (24) 1 (32)가 , (32)
 R · G · B (33) , (Cr) (33)가

(32) (33) , ITO (34)
 (34) (35) (35) 가

TFT (20) (30) (球形) ()가 , TFT TFT
 (20) (30) , TFT (20) (30)

(23) (22) , TFT(25)가 (on
) (24) 가 , (24) (34)
 가 (39) , (13)

(3)

11 (12)

(12) (40), (46) (49)
 , (40) (41), (42),
 (43), (44), (45)
 (46) (47) (48)

12 (12) 12 , (12)

(41) (RGBRGB)가 (42) (S11). (41) 2 ()
 (S12a). 가 H"
 , RGB 가 6 (64) , 13
 , 3 가 8 (a) (h) , R · G · B
 , 가 2 H" , (41) H"
 1 가 2 , (42) , R G
 (42) , B ,
 (43) (S12b).
 , 14 , R (OR), G (OG) B (OB)가
 48, 16 56 , R (ER), G (EG) B (EB)가 8, 32
 0 , 14 ,
 , OR="H" , ER="L" , OG="L" , EG="H" , OB="H" , EB="L" (42)
 .
 (43) , (41) (42)
 가 (S13). , (41) " H" , 15
 , 가 .
 (44) , (43) ()
 S14). (45)
 (S15). 15 , OR="L" , OG="H" , OB=
 "H" , ER="H" , EG="L" , EB="L" , OR L" , ER " H" 가
 , R R 가 , 1 (1
)
 (47) (S16, S17). , 16
 , N 가 N+1 , H" , RGB , OR, OG, OB, ER, EG, EB
 (47) H" , 5
 .
 (48) , (47) , 17 가 ,
 가 가 (S18).
 , H" (S19).
 (49) , (, 8) (48)
 가 H" (FLK) H" , (, 8)
 (48) 가 L" (FLK) L" ()
 S20).
 , (12) , R
 , G B 6 .

()

18 (41) , 18 (B)

XOR(exclusive OR) (U11, U16) , AND (U12, U13, U15, U17, U18, U20) NOR
 (U14, U19) , OR (U21) . XOR (U11) B
 5 (DOB5) B 5 (DEB5)가 , B H"
 , L H" , L" .

AND (U12) , B 5 (XDOB5), B
 4 (DOB4), 3 (DOB3), B 5 (DEB5),
 B 4 (XDEB4) B 3 (XDB
 3)가 , H" " H" , L" .

AND (U13) , B 5 (DOB5), B 4
 (XDOB4), 3 (XDOB3), B 5
 (XDEB5), B 4 (DEB4) B 3 (DE
 B3)가 , H" " H" , L" .

NOR (U14) , AND (U12, U13) H" " L" ,
 " L" H" . AND (U15) , XOR (U11) NOR (U14) " H
 " H" , L" .

XOR (U16) B 4 (DOB4) B 4 (DE
 B4)가 , H" , L H" , L" .

AND (U17) , B 4 (XDOB4),
 3 (DOB3), 4 (DEB4) 3 (XDE
 B3)가 , H" " H" , L" .

AND (U18) , B 4 (DOB4), B 3
 (XDEB3), B 4 (XDEB4) B 3
 (DEB3)가 , H" " H" , L" .

NOR (U19) , AND (U17, U18) H" " L" ,
 L" H" .

AND (U20) , NOR (U14), XOR (U16) NOR (U19) " H" H
 " H" , L" . OR (U21) , AND (U15, U20)
 H" " H" , L" L" (HB) .

(41) , 13 8 (a) (h) , 2
 H" , B 가 (a) , B 가 (
 c) (h) (HB) H" , B 가 (e)
 , B 가 (a) (c) (g), (h) ,
 (HB) H" .

L" (HG)가 L" (B) R (U22) , (HR, HG, HB) (HR), G 가 H" H" ,
 ()
 19 20 19 B
 가 B H" , L" (OB) , B 20 ,
 B 가 B H" , L" (EB) ,
 " , L" (42) , R 가 R H
 , H, L" (OR) , R 가 R
 H" , L" (ER) , G 가 G
 G H, L" (OG) , G 가
 가 19 20 (EG) , 가 .
 19 , 6 XOR (U25 U30) , 6 AND (U31 U36) , 5 (U38 U41)
 , OR (U42)
 XOR (U25) B 5 (DOB5) B 5 (DEB5
)가 , H" , " L" H" , L" . A
 ND (U31) , XOR (U25) B 5 (DOB5) H"
 H" , L" .
 XOR (U26) B 4 (DOB4) B 4 (DE
 B4)가 , H" , L" H" , L" .
 AND (U32) , XOR (U26) , B 4 (DOB4) (U37)
 XOR (U25) H" H" , L" .
 XOR (U27) B 3 (DOB3) B 3 (DE
 B3)가 , H" , L" H" , L" .
 AND (U33) , XOR (U27) , B 3 (DOB3), (U38)
 XOR (U26) (U37) H" H" , L" .
 XOR (U28) B 2 (DOB2) B 2 (DE
 B2)가 , H" , L" H" , L" .
 AND (U34) , XOR (U28) , B 2 (DOB2), (U39)
 XOR (U27) , (U38) (U37) H" H"
 , L" .
 XOR (U29) B 1 (DOB1) B 1 (DE

B1)가 , H" , L" H" , L" .
 AND (U35) , XOR (U29) , B 1 (DOB1), (U40)
 XOR (U28) , (U39) , (U38) (U37) H"
 H" , L" .

XOR (U30) B 0 (DOB0) B 0 (DE
 B0)가 , H" , L" H" , L" .
 AND (U36) , XOR (U30) , B 0 (DOB0), (U41)
 XOR (U29) H" , (U40) , (U39) , (U38) (U
 37) H" H" , L" .

OR (U42) , AND (U31 U36) H" H" , L"
 (OB) . (OB)가 H" , B 가 B

20 , XOR (U25 U30) B B
 가 , B 가 19 B , 20 B
 , B 가 B H" (EB)가 .

14 , RGB 가 48, 16, 56 , RGB 가
 8, 32, 0 , OR="H" , ER="" L" , OG="" L" , EG="" H" , OB=""
 "" H" , EB="" L" .

()

21 24 (43) (44) .
 , 21 B , R G , B R
 , R G , G B
 가 , .

21 , (U45) , XNOR (U46, U47) , AND (U48)
 . (U45) 19 (OB)가 .
 (U45) (OB) (X_SYSCCK) . (X_SYSCCK)
 (U45) (H - sync) (H_CLR)

XNOR (U46) , (U45) 1 (OA) 2 (OB)
 H" , L" L" , 1 (OA) 2 (OB)
 H . , XNOR (U47) , (U45) 2 (OB) 3 ((OC)
 (OC) H" , L" L" , 2 (OB) 3
) H" H" , L" . AND (U48) , XNOR (U46, U47)
 (A3) .

, 19 (A3)가 H" (OB) 3 , AND (U48)

3 R 가 R H" (OR)
 H" (A1), G 가 G
 H" (OG) 3 H" (A2), R
 가 R H" (ER) 3 H"
 (A4), G 가 G (EG)
 3 H" (A5), B 가 B
 H" (EB) 3 H" (A6)가

AND (U50) , (A1 A6)가 H" H" (YOKO) (YOKO
) , 14 H" , 2 RGB 가 3
 H"

OR (U49) , (U45) 1 3 가 H H" , H"
 L (TATE_OR) , TATE_OR, TATE_OG, TATE_ER, TA
 TE_EG, TATE_TB가 (46)

22 (U51), AND (U52), D (U53), (U54, U55), JK
 (U56), (U57) (U57) (U51), D (U53),
 (U54, U55) JK (U56) (X_SYSCCK) (U51),
 D (U53), (U54, U55) JK (U56) (H_CLR)

(U51) , 19 AND (U22) (B) , (X_SYSCCL
 K) . AND (U52) , 21 AND (U50)
 (YOKO) , (U51) 1 3 (OA, OB, OC) , 가
 H" H" , L" . D (U53) AND (U52)
 (X_SYSCCK) (U54, U55) D (U53) (X_SYSCCK)

JK (U56) , (X_SYSCCK) (U55) 2 (OB)
 , (F) . (F) 1 32 H"

23 , D (U60, U61), (U62), AND (U63) (U64)
 . D (U60) (X_SYSCCK) JK (U56) (F)
 . D (U61) (X_SYSCCK) D (U61)
 (X_SYSCCK) (U64) D (U60, U61)

AND (U63) , D (U60) , (U62) D (U61) H"
 H" , L" (F_CLK) , D (U61, U62) (STC
 LR) . (STCLR) (on) L"

()

24 (47) .

(U65), XOR (U66, U67, U68) AND (U69) .

(U65) , 21 OR (49) (TATE_OB) 23
 (F_CLK) (U65) , (F_CLK) (U65)

(V_CLR) . (U65) , (F_CLK)
 가 .

XOR (U66) , (U65) 1 (OA) 2 (OB) H,
 L" H" , 1 (OA) 2 (OB) L . XOR
 (U67) , (U65) 2 (OB) 3 (OC) H, L"
 H" , 2 (OB) 3 (OC) L . XOR (U68) ,
 (U65) 3 (OC) 4 (OD) H, L" H"
 , 3 (OC) 4 (OD)가 L .

AND (U69) , XOR (U66, U67, U68) H H" , L
 (TOB) .

(TOB) 4 (4) (TATE_OB)가 H" . ,
 B 1

, R 1 (TOR), G
 (TOB), 1 (TOG), B 1
 G 1 (TEG)가 . (TER),

()

25 (48) . OR (U70), (U71, U72)
 JK (U73) . OR (U70) 23
 (TOR, TOG, TOB, TER, TEG, TEB)가 . OR (U70) , 가 H"
 H" , L" L" .

(U71, U72) OR (U70) (V_CLK)
 (U72) 2 가 JK (U73) . JK (U73) (U72)
 (V_CLK) , (FLK1)

JK (U73) (FLK1) , 32 H"

(49) , (FLK1) , (FL
 K) . , (49) , (46) (FLK1)
 가 (, 8) H" (FLK) H" , L
 " (FLK) L" .

(4)

26 (14)

(14) (51) , (52) , (53) ,
 (54) , (55) , D/A (56) , (57)

(51) , (49) (FLK) , (H
 - sync) (P1 Pn) (P1 Pn) (FLK)가 L"
 (P1 Pn) 1 3a 1
 (FLK)가 H" (P1 Pn) 2 3b
 2

(53) n (53a) (52)
 (DSTIN), (DCLK) (STB) , (53)
 (53a) (53) (DATIN)
 (53) (RGB) (DCLK) 가 (53a)
 R , G B (52)

(54) n (54a) (54a) (STB)
 4a) R , G (53) B (51) (P1 Pn) 가 (5)

(55) (54) (54) (波高値)가, , 3.3V 가, , 12V
 D/A (56)

D/A (56) n D/A (56a) D/A (56a) , (P1 P
 n)가 가 R , G B (H" L") ,
 (+) (-) (O₁ Q_n) (57) n
 (57a) , D/A (56)
 (O₁ Q_n) (STB) (13) (23) (10
).

, , 2 , ,
 , 가 , ,
 가 , ,

, 1 1 , 2 2
 , 1 2 1 2
 2

(2)

(41) 2 (42) 가 1 11
 , , , 11
 1 , 13 8 , 가 9
 , 27 G (OG) 가 20, G (EG)
 , OG 8() OG' 12 EG 29 ,
 EG 8() EG' 21 OG 20 , OG' EG
 , EG'가 OG , EG OG 9 , OG' EG
 , OG' EG , EG' OG , OG EG 9
 , OG EG 가 9 , EG' EG OG EG
 OG , EG' EG , EG'

28 (41) 8 , (41) ,
 B 8 ,
 R 8 , G 8 ,
 B 8 , R 8 ,
 G 8 가 .

OR (U75, U76), AND (U77), (U78) XOR (U79)
 OR (U75) B 5 (DOB5), 4 (DOB4) 3 (DOB3)가
 , 가 H" H" , L" L" (FOB_DMY)

OR (U76) , 4 B (DOB4) 3 B (DOB3)가
 , 가 H" H" , 가 L" L" . AND (U77)
 , B 5 OR (U76) , H" H" ,
 L" (FOB5)

(U78) B 3 , (FOB3) . XOR (U
 79) , (U78) , B 4 H" , " L"
 H" , L" (FOB4)

8 (FOB5, FOB4, FOB3) 3 , B 3
 , B 8 .

, R 8 , G 8
 , B 8 , R 8 ,
 G 8 , 9
 (43)

29 (42) 29 , 19
 , HOB5, HOB4, HOB3, HOB2, HOB1 8
 5 1 .

, 8 AND (U80) , 8 B , B 가 B
 H" , L" (OB)가 .

, 8 R 가 R H"
 (OR), 8 G 가 G H (E
 OG), 8 B 가 B H" (E
 B), 8 R 가 R H (ER), 8
 G 가 G H" (EG)가 .

1 , 가 ,
 8 15 가 . , 8 , ,
 가 .

(3)
 , 3 .

1 , 1 2 , 2 1
 (2) , ,
 1 2 9 , 2 1
 6 , (hysteresis) .

, , 8 6 , 8 28

30 6 AND (U81, U84, U85, U89), OR (U82, U
 83), XOR (U86, U91, U93), NOR (U87), NAND (U90) (U92, U94)

AND (U81) , B 2 (DOB2) 1 (DOB1)가 . AND
 (U81) , 가 H" H" , L" . OR (U82) , AND (U
 81) , B 5 (DOB5), 4 (DOB4) 3 (DOB3)가 ,
 가 H" H" , L" L" (SOB_DMY) .

AND (U85) , B 2 (DOB2) 1 (DOB1)가 ,
 가 H" H" , L" . OR (U83) , AND (U85) ,
 B 4 (DOB4) 3 (DOB3)가 , 가 H" H" ,
 L" L" . AND (U84) , OR (U83) , B
 5 (DOB5)가 , H" H" , L" (SOB5) .

AND (U89) , B 2 (DOB2) 1 (DOB1)가 ,
 가 H" H" , L" . NOR (U87) , AND (U89) ,
 B 3 (DOB3)가 , 가 H" L" , H" L"
 . NOR (U86) , NOR (U87) , B 4 (DOB4)가

, H" , L" H" , H" L" L" (SOB4)

NOR (U90) B 2 (DOB2) 1 (DOB1)가 ,
H" L" , H" . XOR (U91) , NAND (U90) B
H" L" 3 (DOB3)가 , H" , L" H" ,
H" L" L" (SOB3) .

(U92) B 2 (DOB2)가 , (U94) B
1 (DOB1)가 . XOR (U93) (U92) (U94)
, H" , L" H" , H" L" L" (SOB2)
, (U94) (DOB1) .

, B 6 , R 6
6 , R 6 G 6 , B 6 R 6 가
, G 6

31 (U94) 8 2 가 , (A0
A5) 6 (SOB_DMY) SOB5 SOB1 , (B0 B5) 8
(FOB_DMY) FOB5 FOB1 . (U94) , (FLK)가 L"
, 1 (HOB_DMY) HOB5 HOB1 , (B0 B5) (Y0 Y5)
, 2 (HOB_DMY) HOB5 HOB1 , (U94) , (FLK)가 H"
(HOB_DMY) HOB5 HOB1 . (A0 A5) (Y0 Y5)

(U94) 29 .

가 , 1 2 9
, 2 , 9 1 6
, 가 8 , 1 가 . ,

(4)

32 4 , 1 ,

32 , AND (U95) (U71) 4 (QD) (U72) 3 (QC)
가 . AND (U95) , H" H" , L" 3 (Q
(U96) (B) . , (U96) (A) (U72) 3 (Q

C) (25 JK (U73)) (U96) , (FLK)가 L" AND (U95)

, 가 72 2 72 , 63 ,
70 , 63 ,
()

가 5 , ,

2

(57)

1.

2

2.

1

2

가

2

3.

2

, 1 가 .

4.

3 ,

, , .

5.

4 ,

, , .

6.

5 ,

(threshold)가 .

7.

5 ,

가 , 가

8.

1 ,

2 가 .

9.

8 ,

2 , 가

1

가 ,

가

2

10.

9 ,
1 2 가 , 2
1

11.

9 ,
1 2 가 , 2
1

12.

,
,
2 ,

13.

12 ,
,
2 , 1 가 , 2
,
, 가

14.

12 ,

가

15.

12

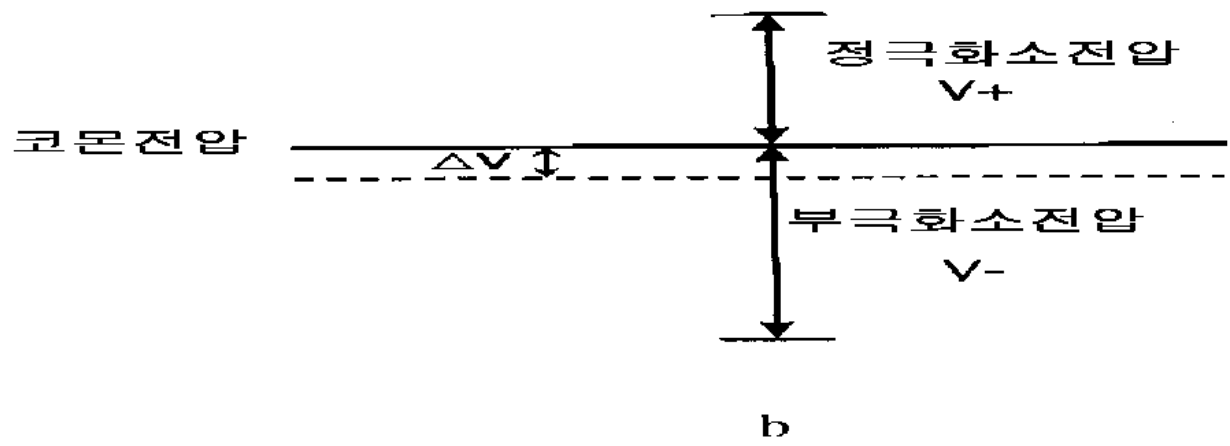
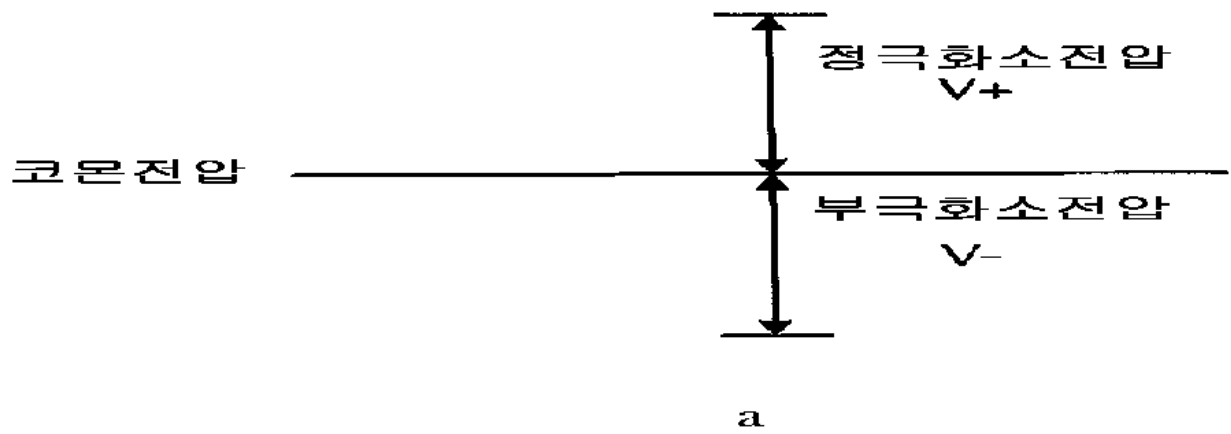
가

16.

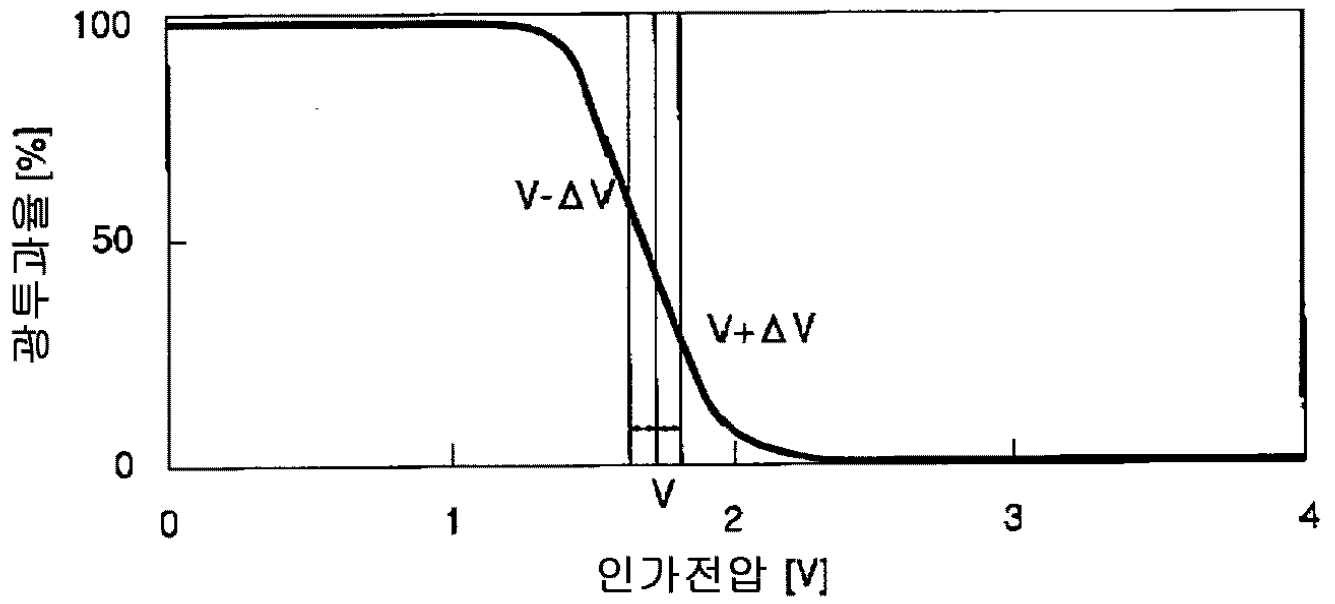
12

가

1



2



3

+	-	+	-	+	-	+	-	+	-	+	-
-	+	-	+	-	+	-	+	-	+	-	+
+	-	+	-	+	-	+	-	+	-	+	-
-	+	-	+	-	+	-	+	-	+	-	+
+	-	+	-	+	-	+	-	+	-	+	-
-	+	-	+	-	+	-	+	-	+	-	+

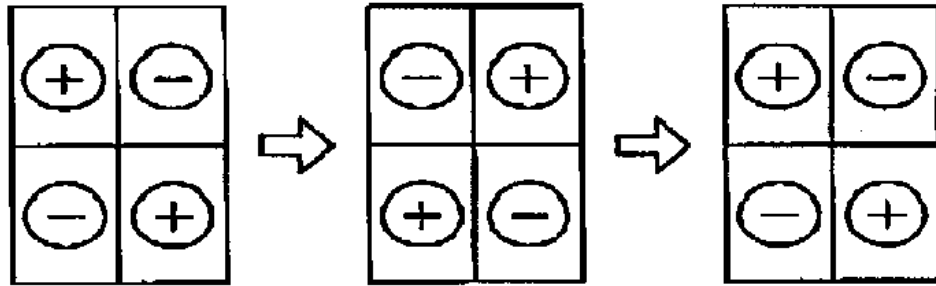
a

+	-	+	-	+	-	+	-	+	-	+	-
+	-	+	-	+	-	+	-	+	-	+	-
-	+	-	+	-	+	-	+	-	+	-	+
-	+	-	+	-	+	-	+	-	+	-	+
+	-	+	-	+	-	+	-	+	-	+	-
+	-	+	-	+	-	+	-	+	-	+	-

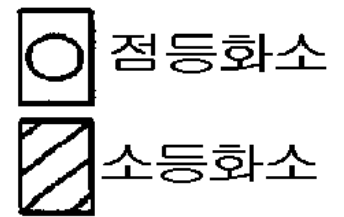
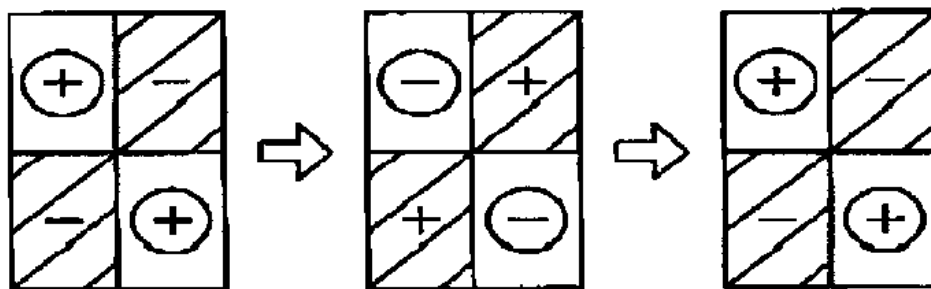
b

4

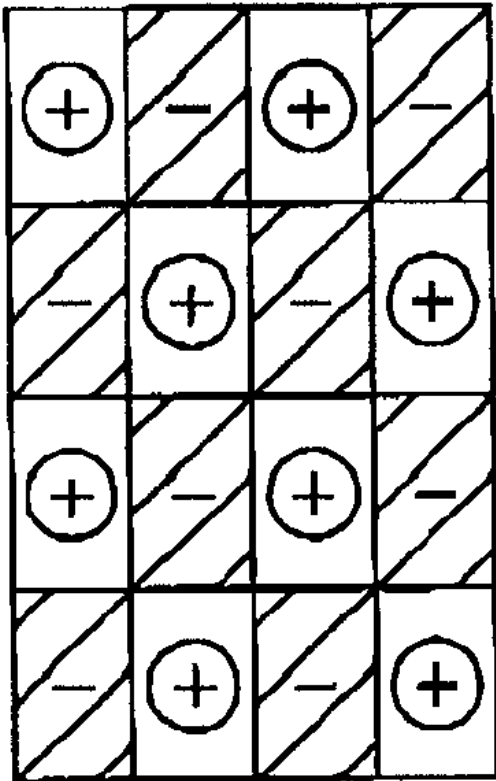
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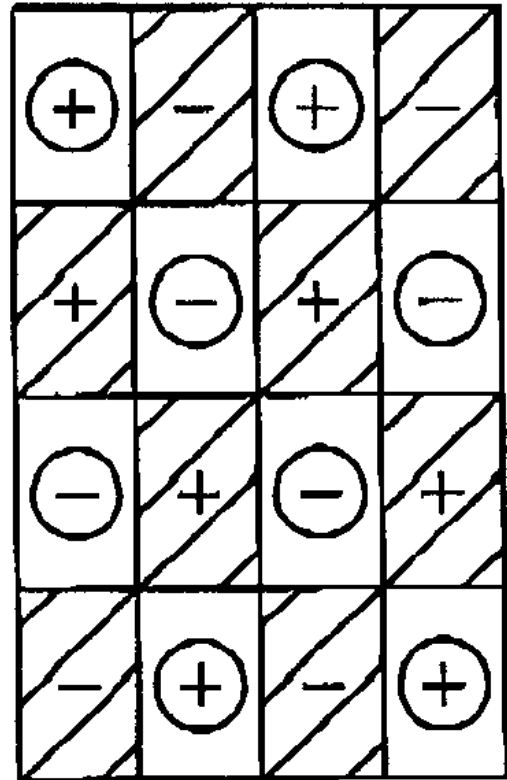
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5

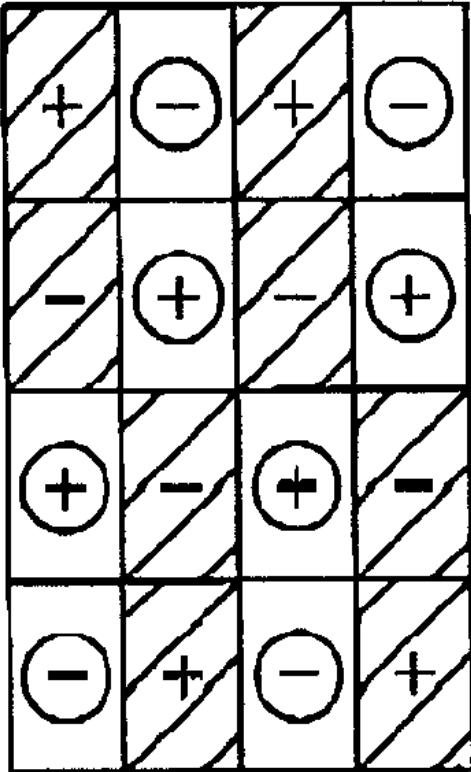


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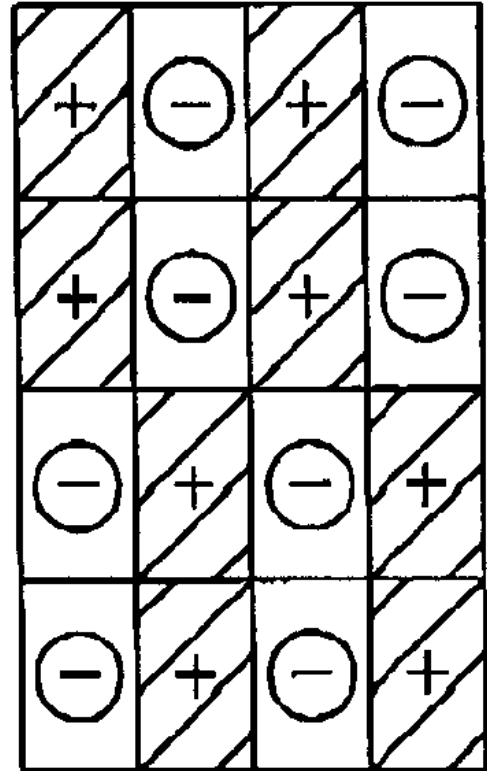


b

6

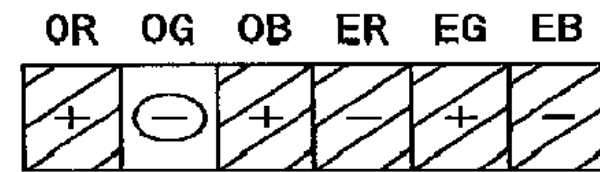
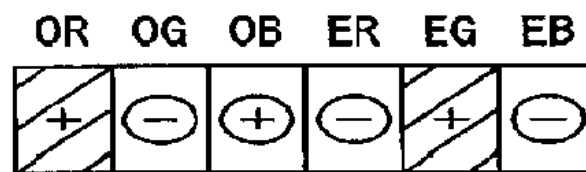
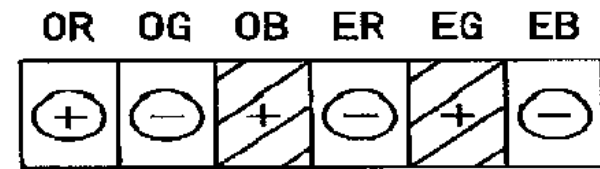
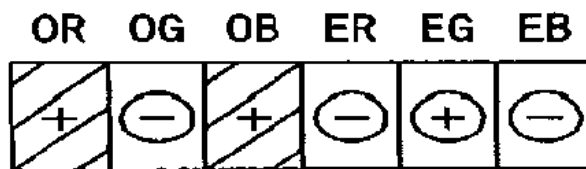
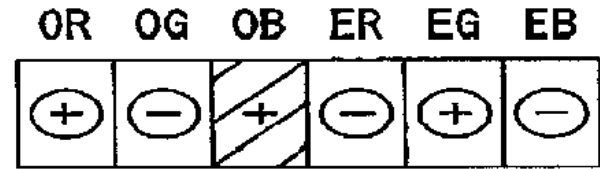
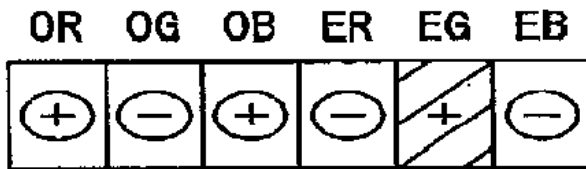
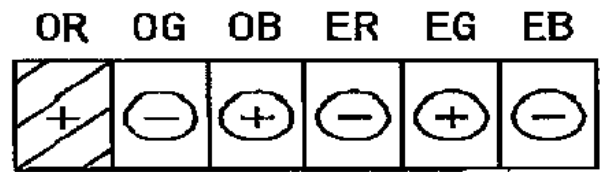
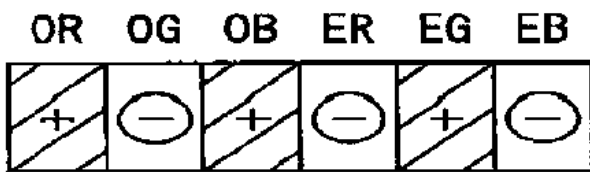


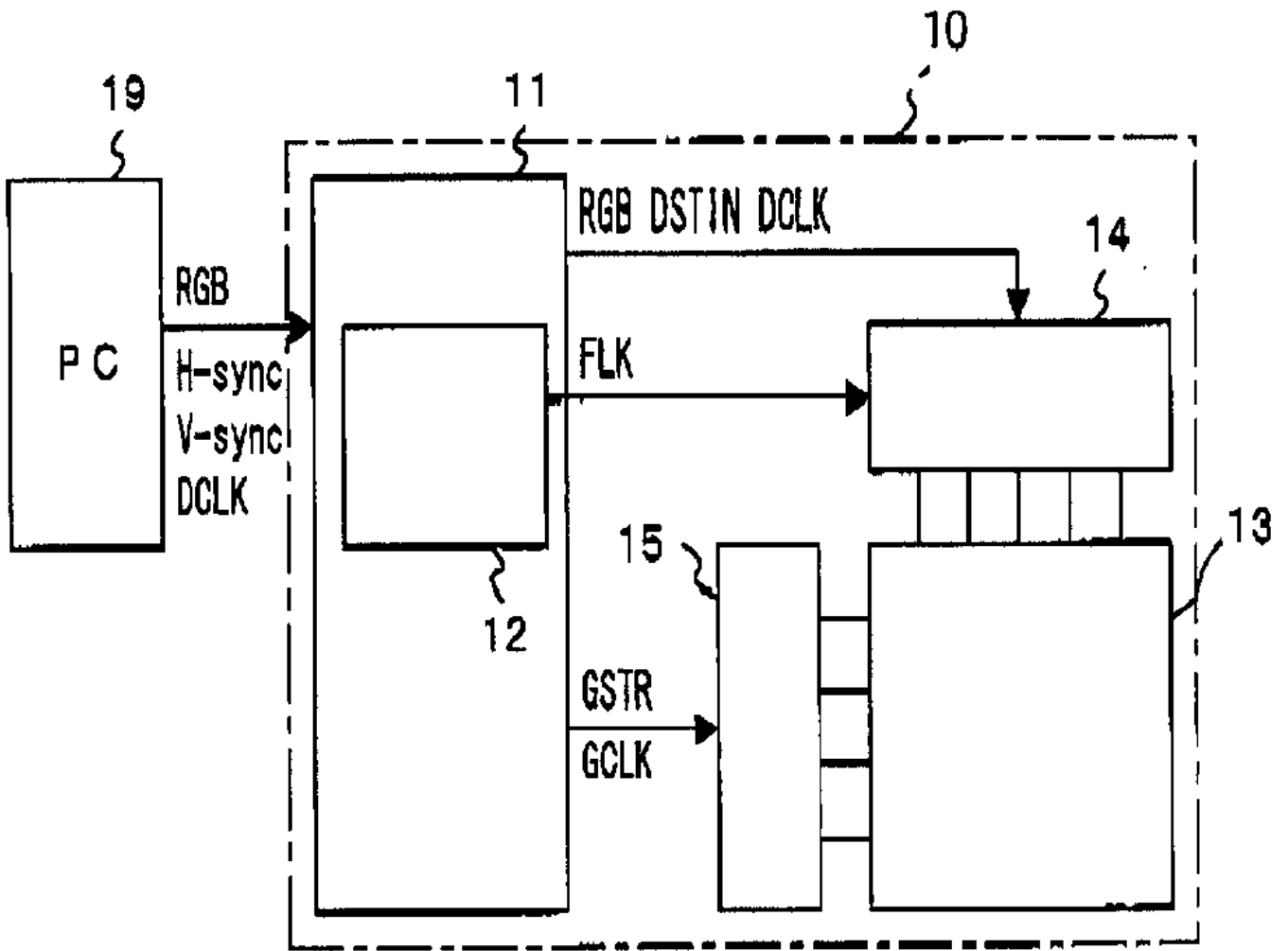
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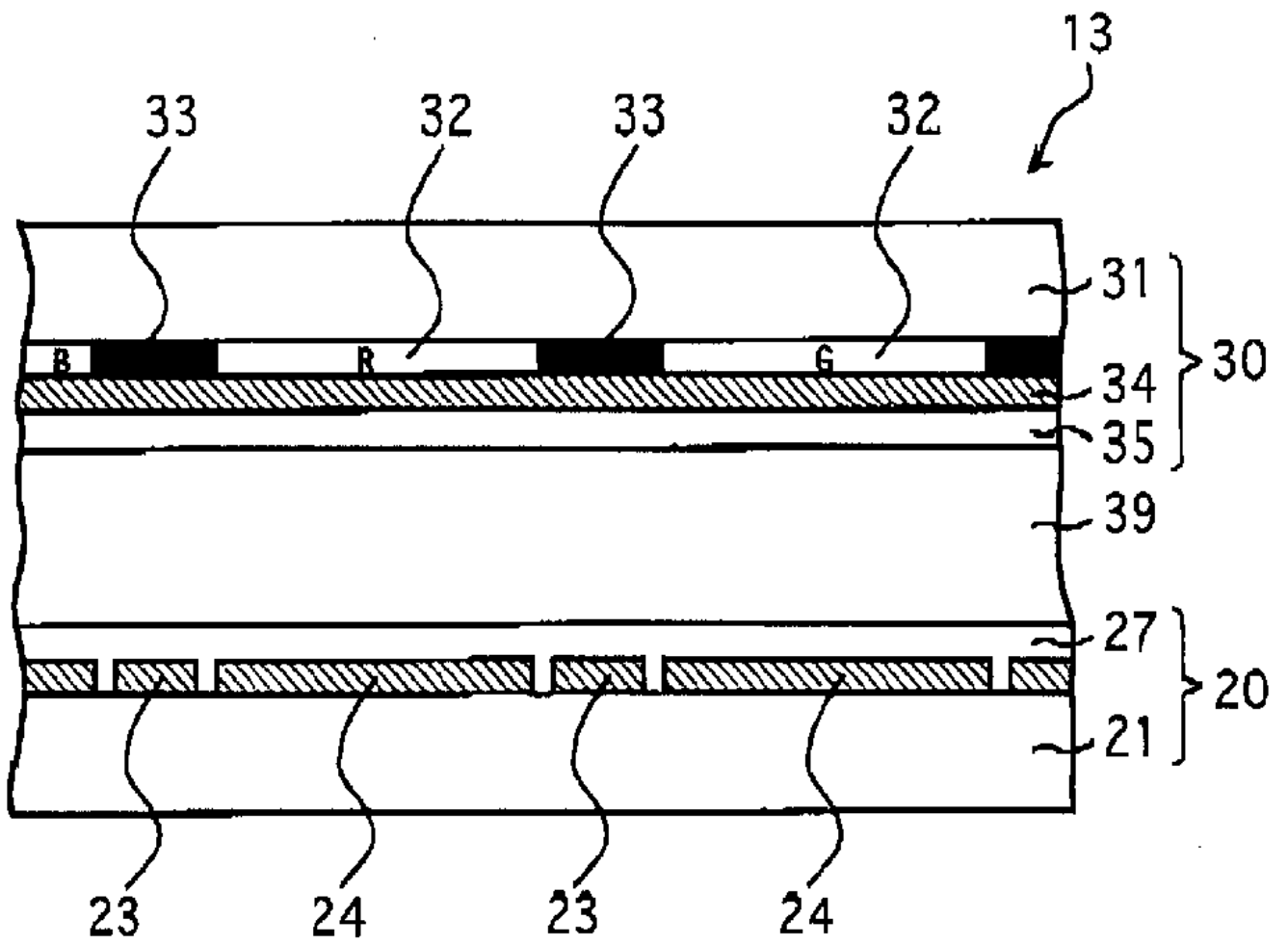


b

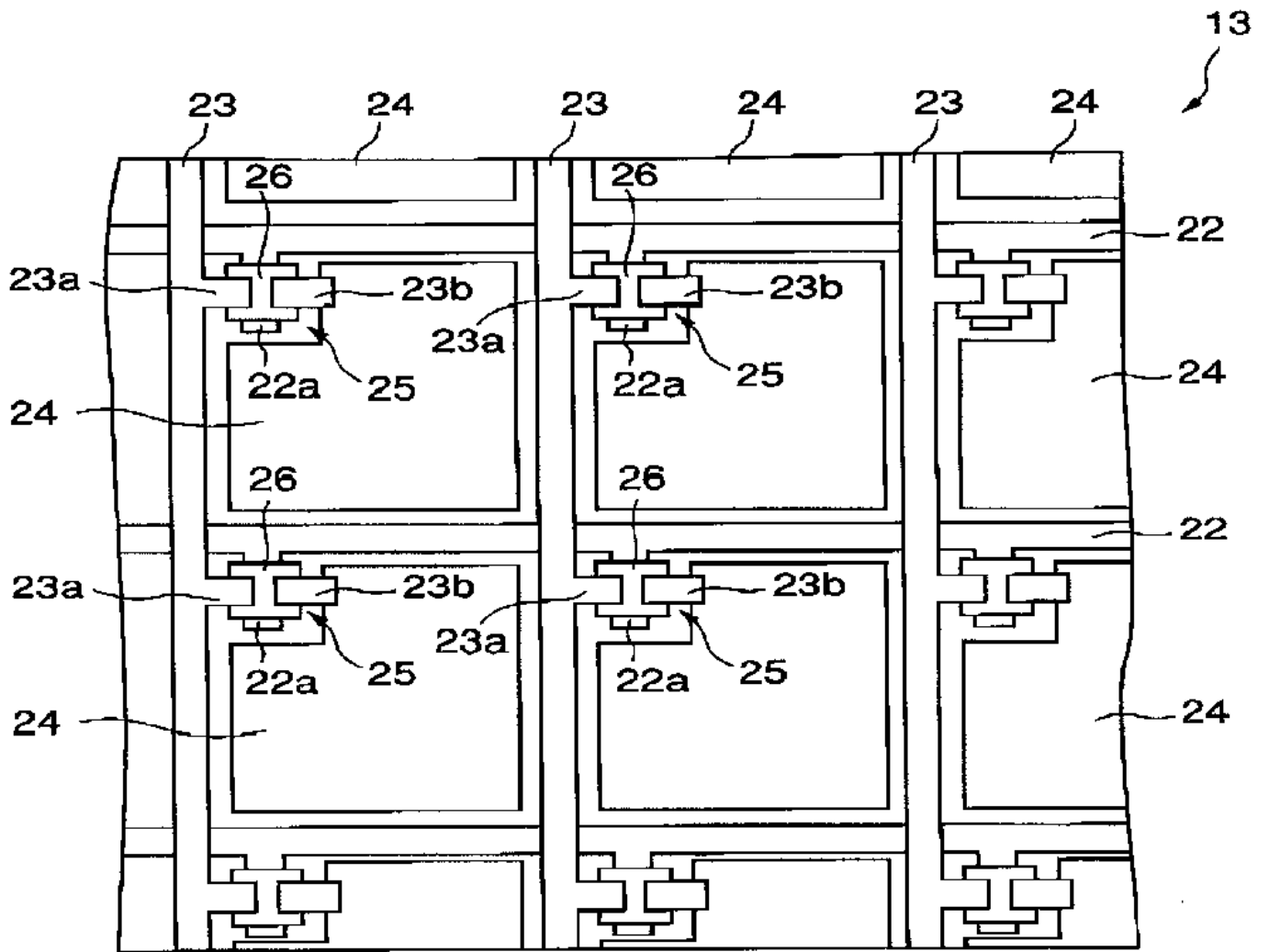
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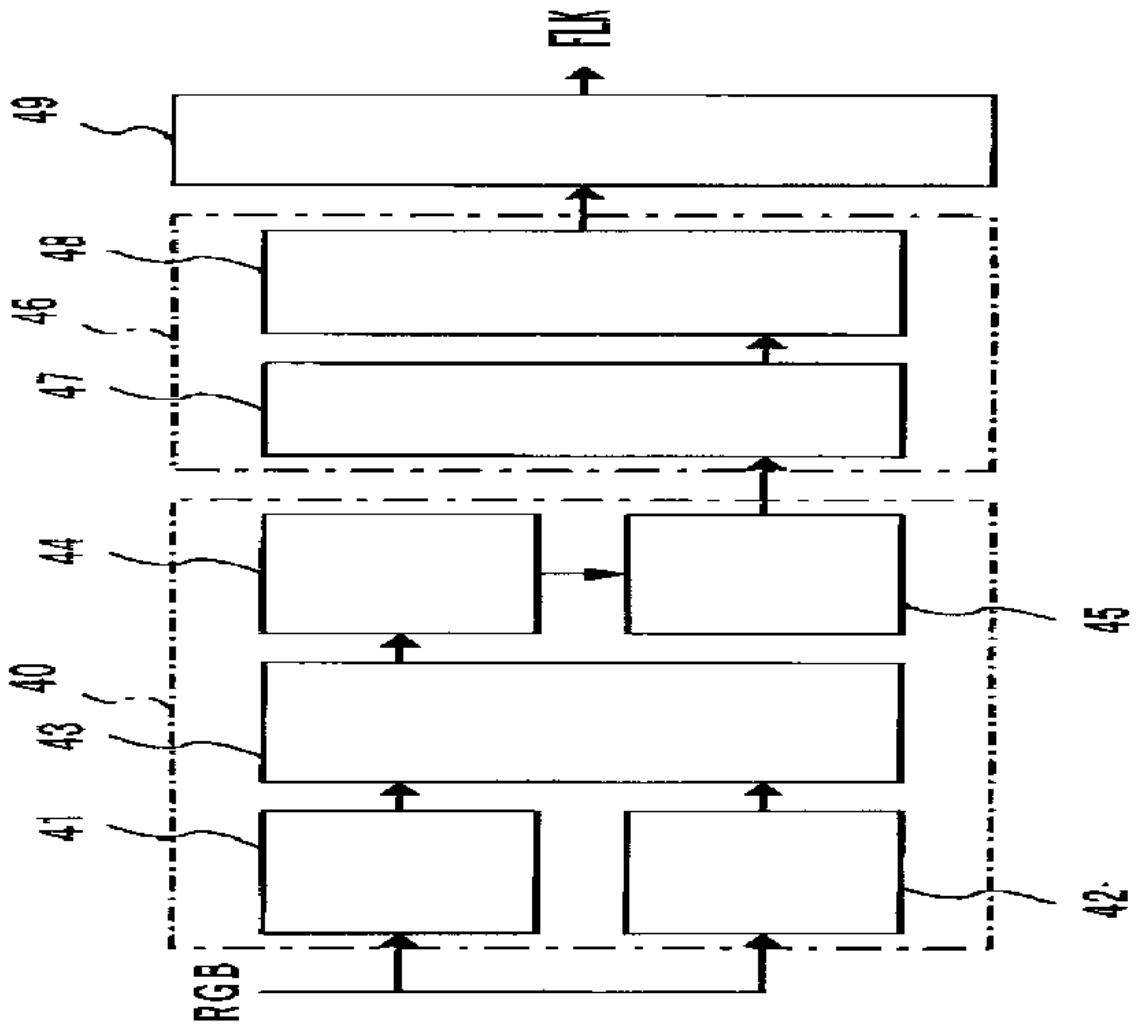


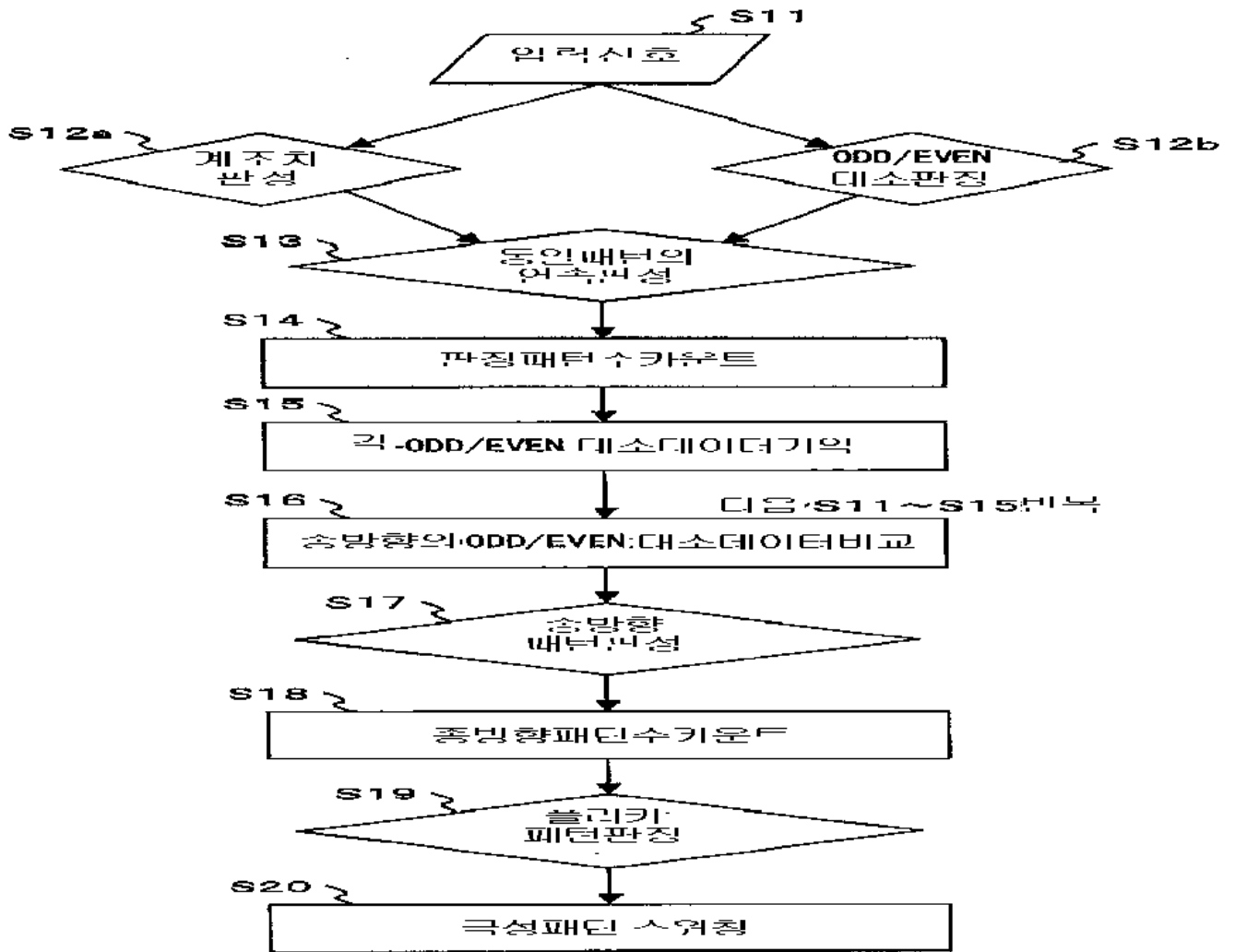


10



11

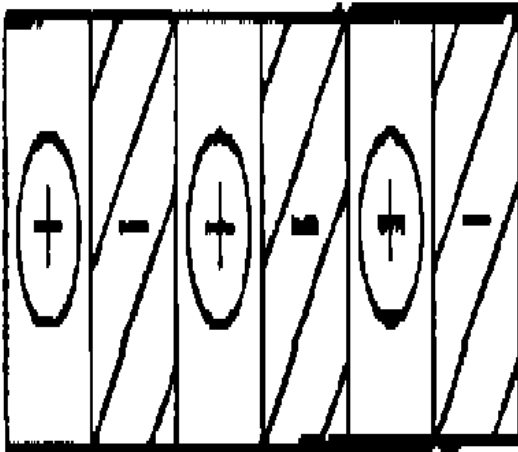




계조그룹	상위3비트			계조
	32	16	8	
(a)	0	0	0	0 ~ 7
(b)	0	0	1	8 ~ 15
(c)	0	1	0	16 ~ 23
(d)	0	1	1	24 ~ 31
(e)	1	0	0	32 ~ 39
(f)	1	0	1	40 ~ 47
(g)	1	1	0	48 ~ 55
(h)	1	1	1	56 ~ 63

14

OR OG OB ER EG EB

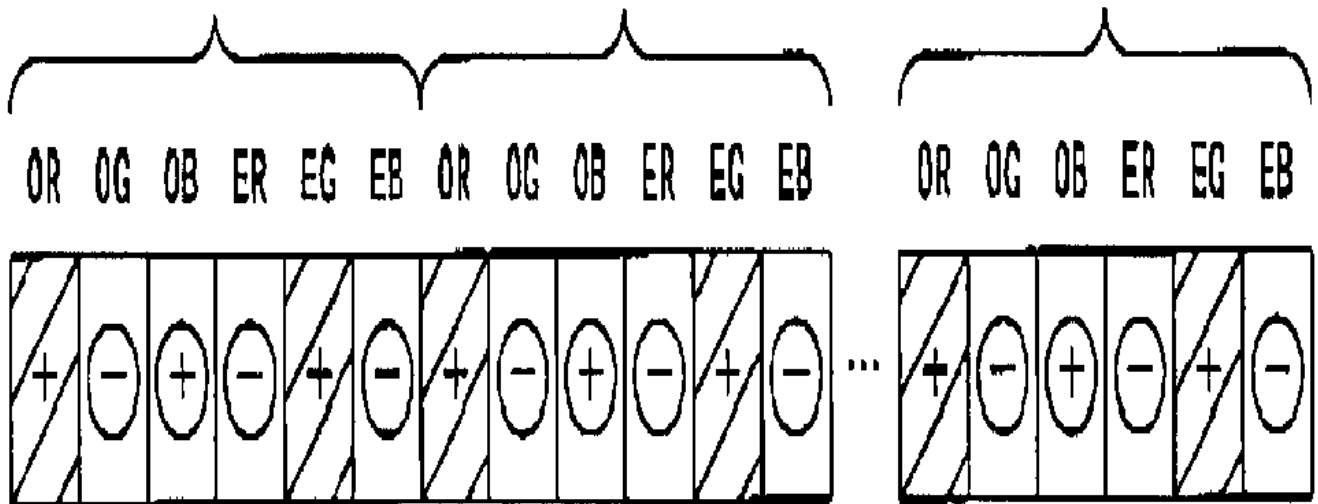


48 16 56 8 32 0

OR = "H" ER = "L"

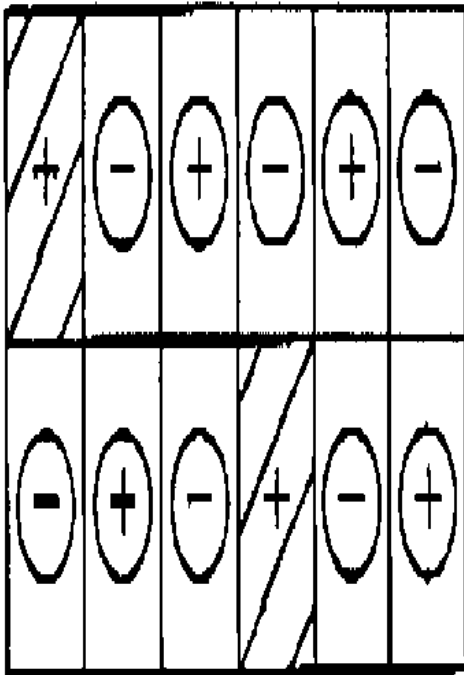
OG = "L" EG = "H"

OB = "H" EB = "L"



OR = "L" ER = "H"
 OG = "H" EG = "L"
 OB = "H" EB = "L"

OR OG OB ER EG EB

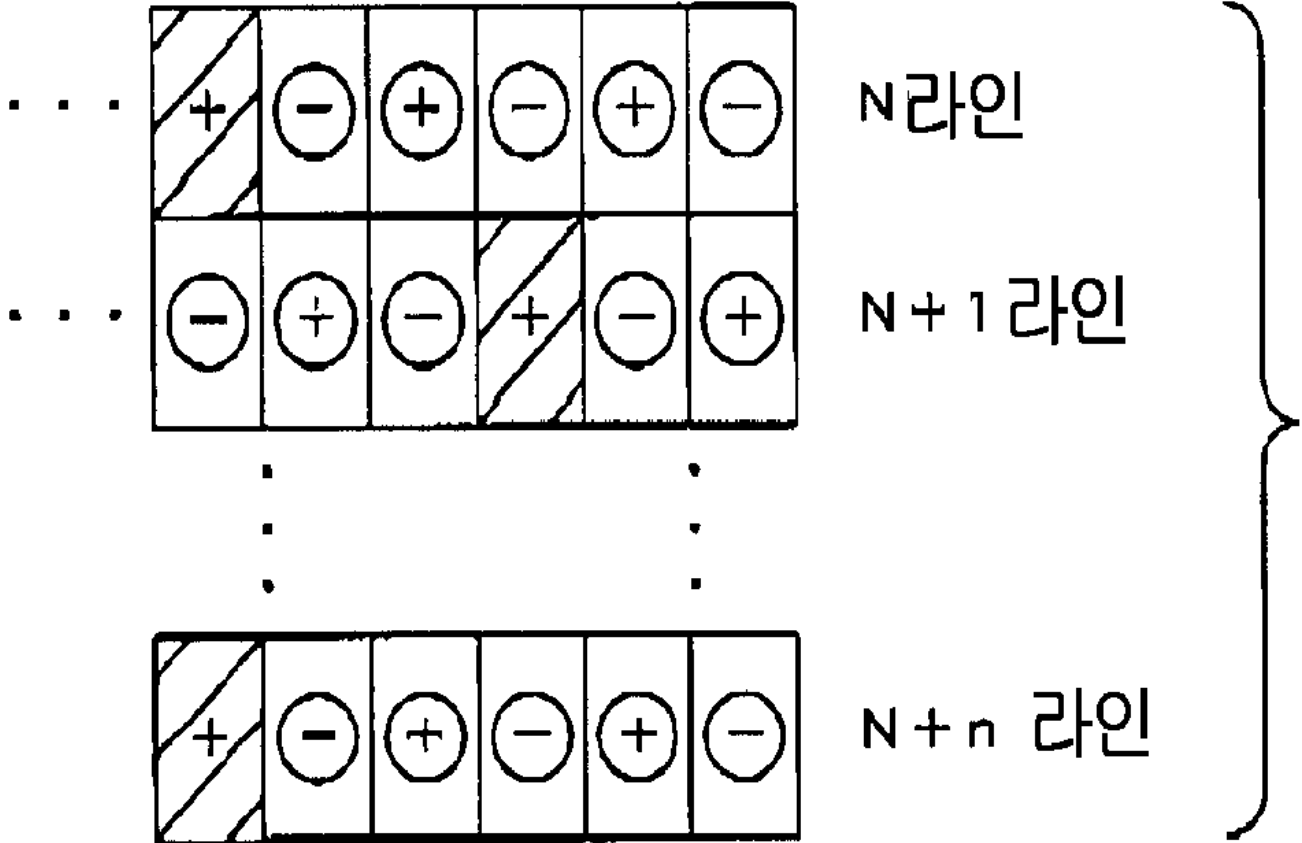


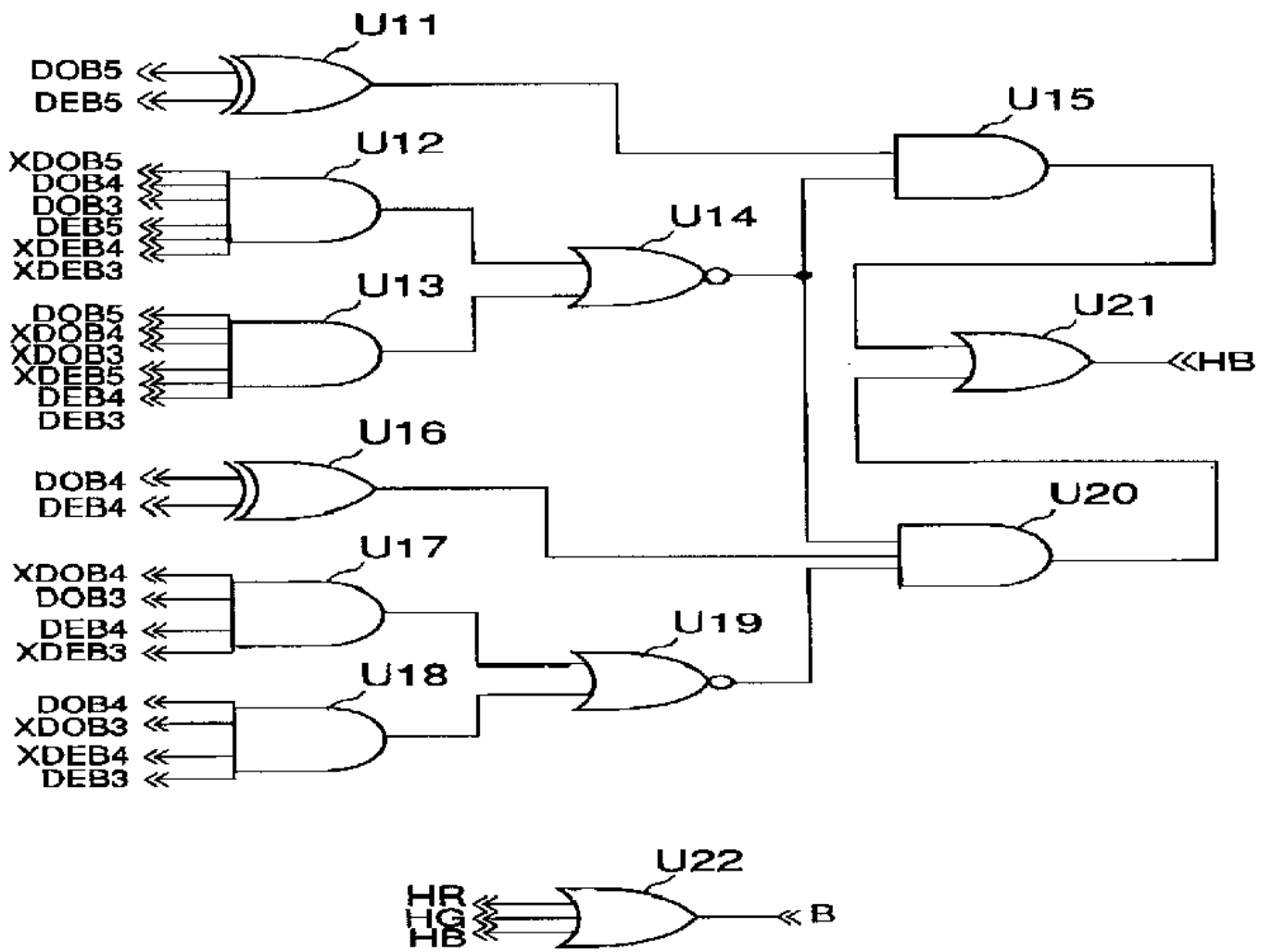
N라인

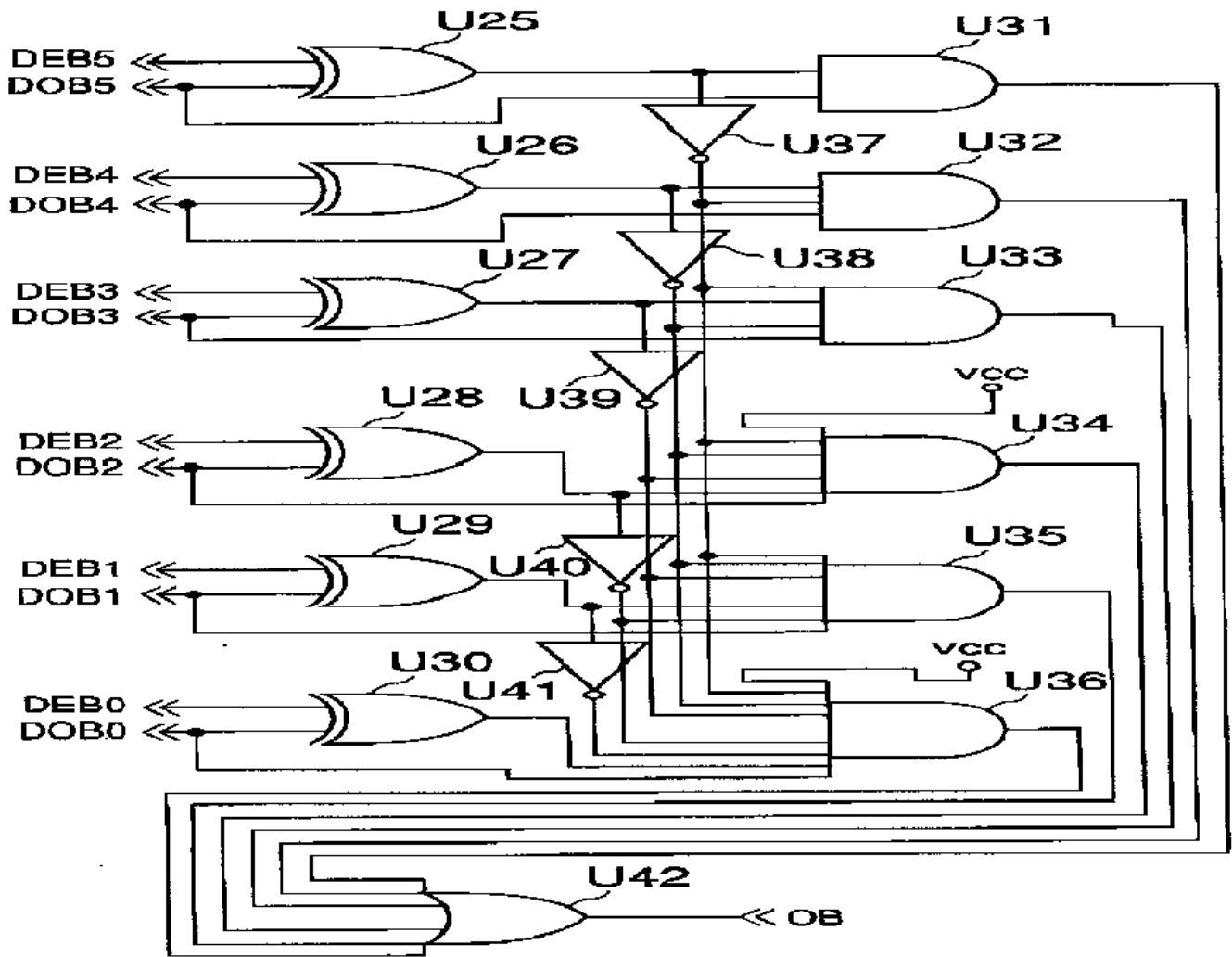
N+1라인

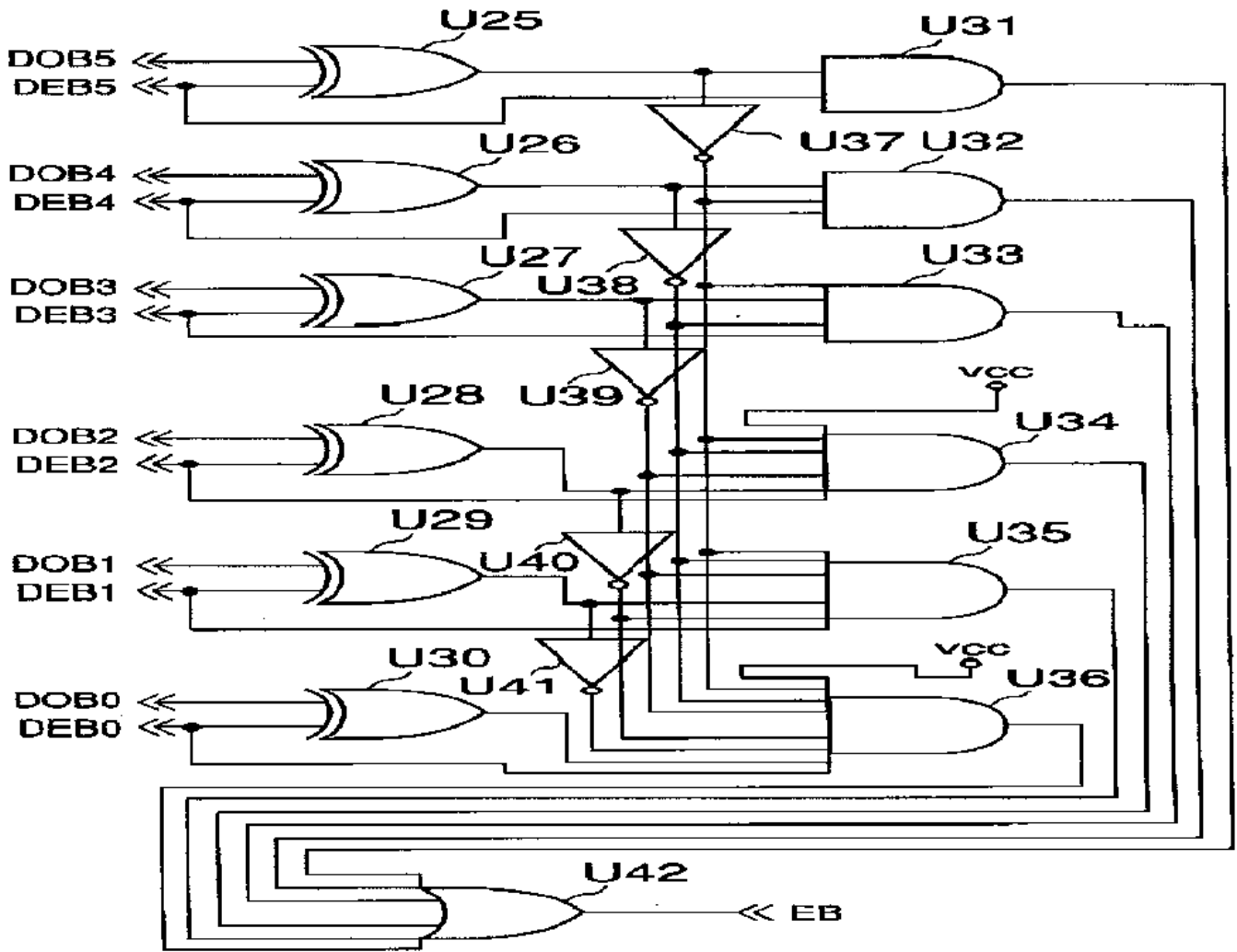
라인	N	N+1	판정
OR	L	< H	*
OG	H	= H	
OB	H	= H	
ER	H	> L	*
EG	H	= H	
EB	H	= H	

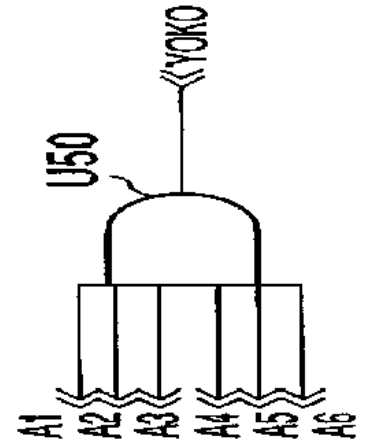
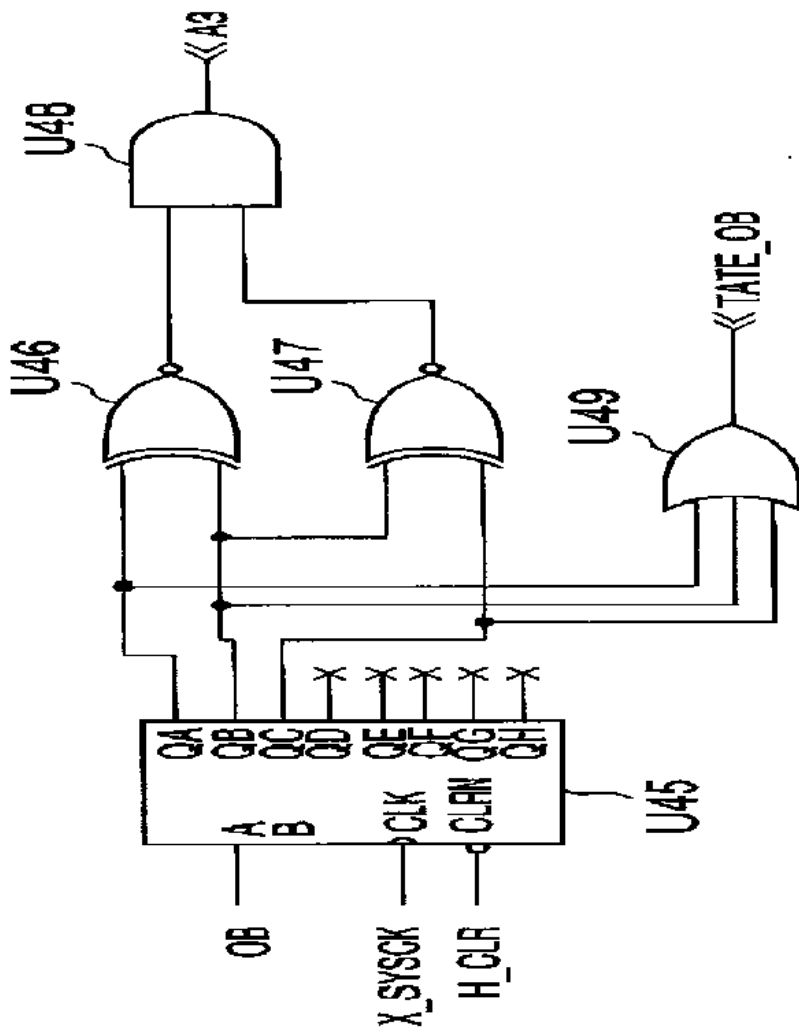
OR OG OB ER EG EB

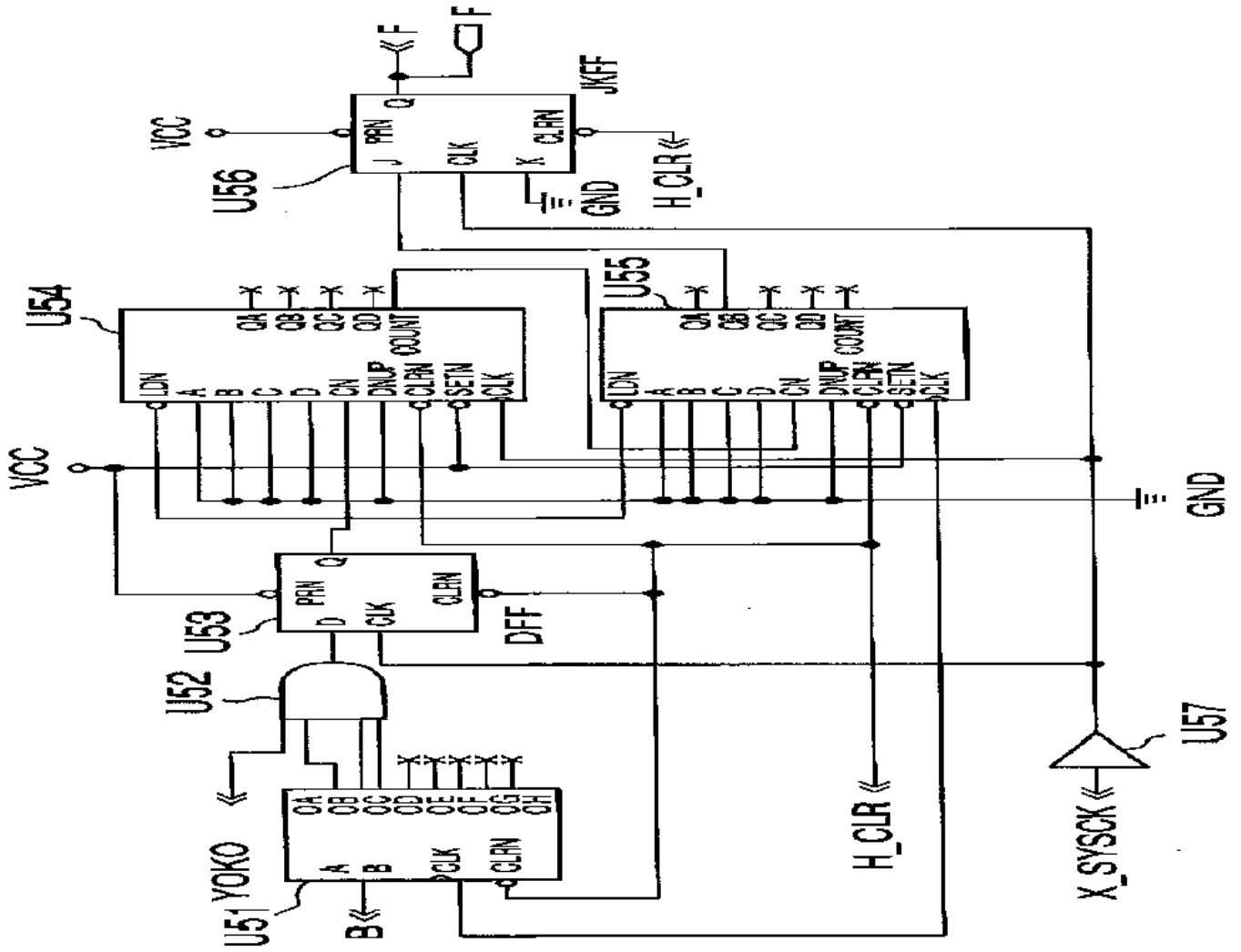


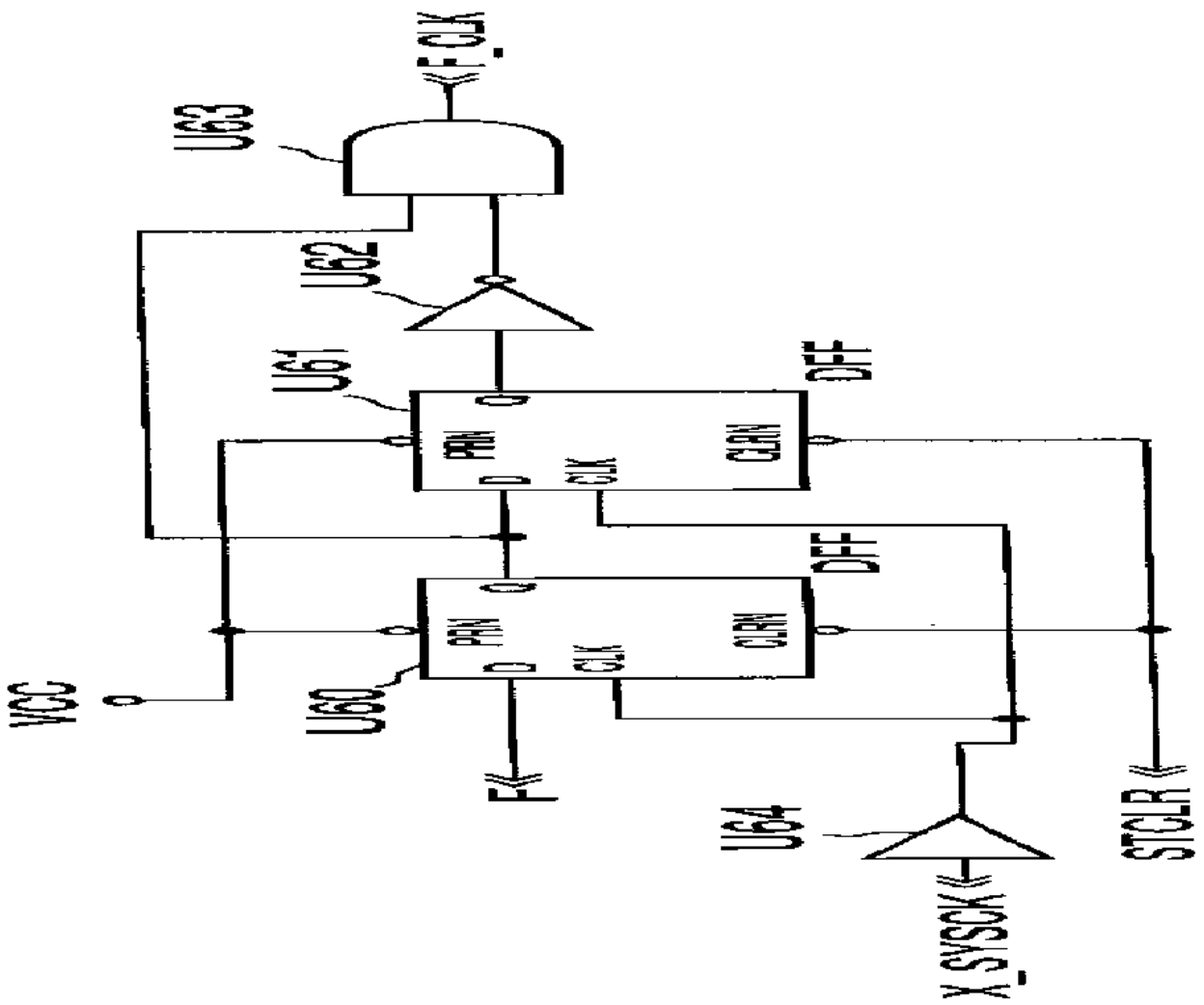


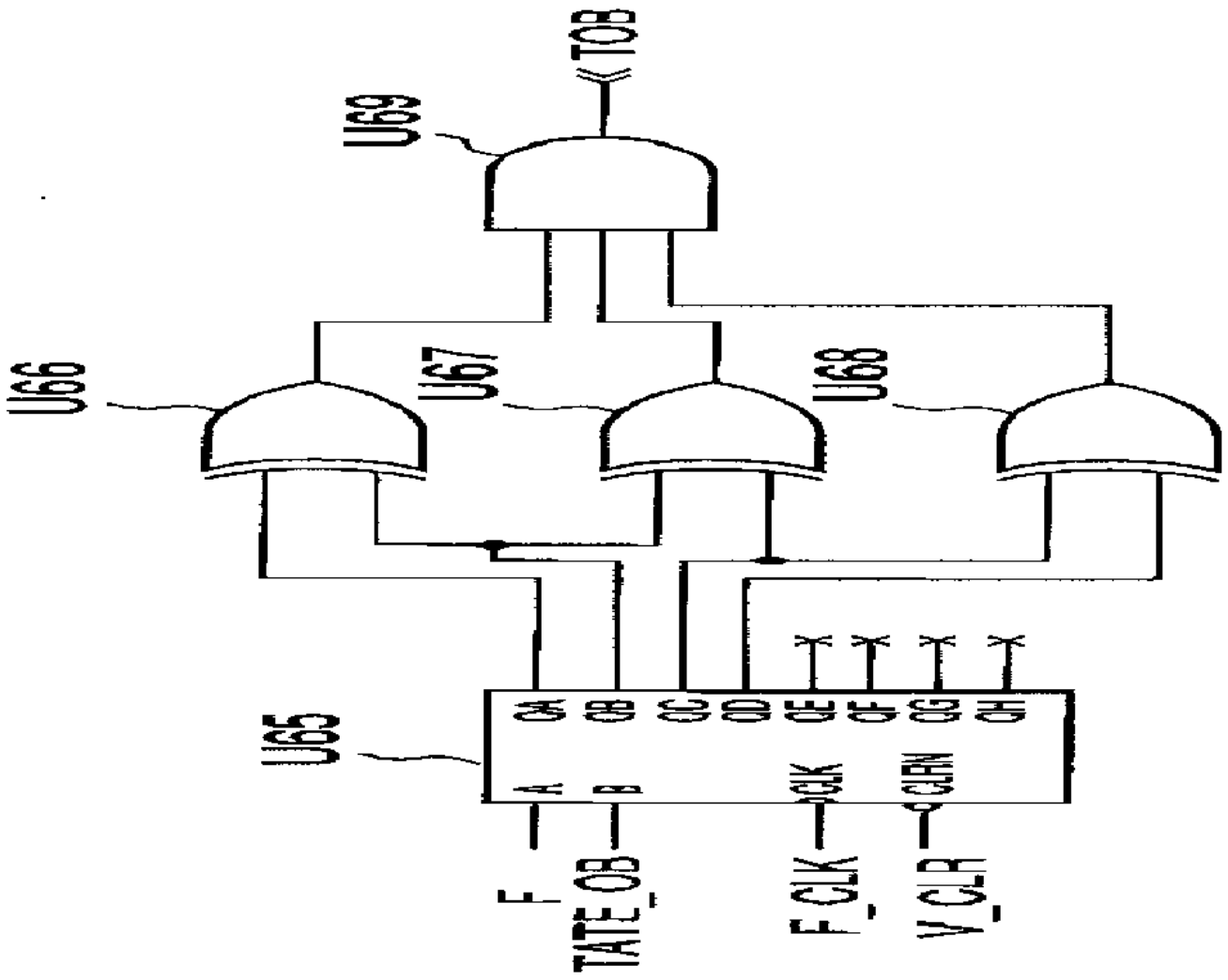


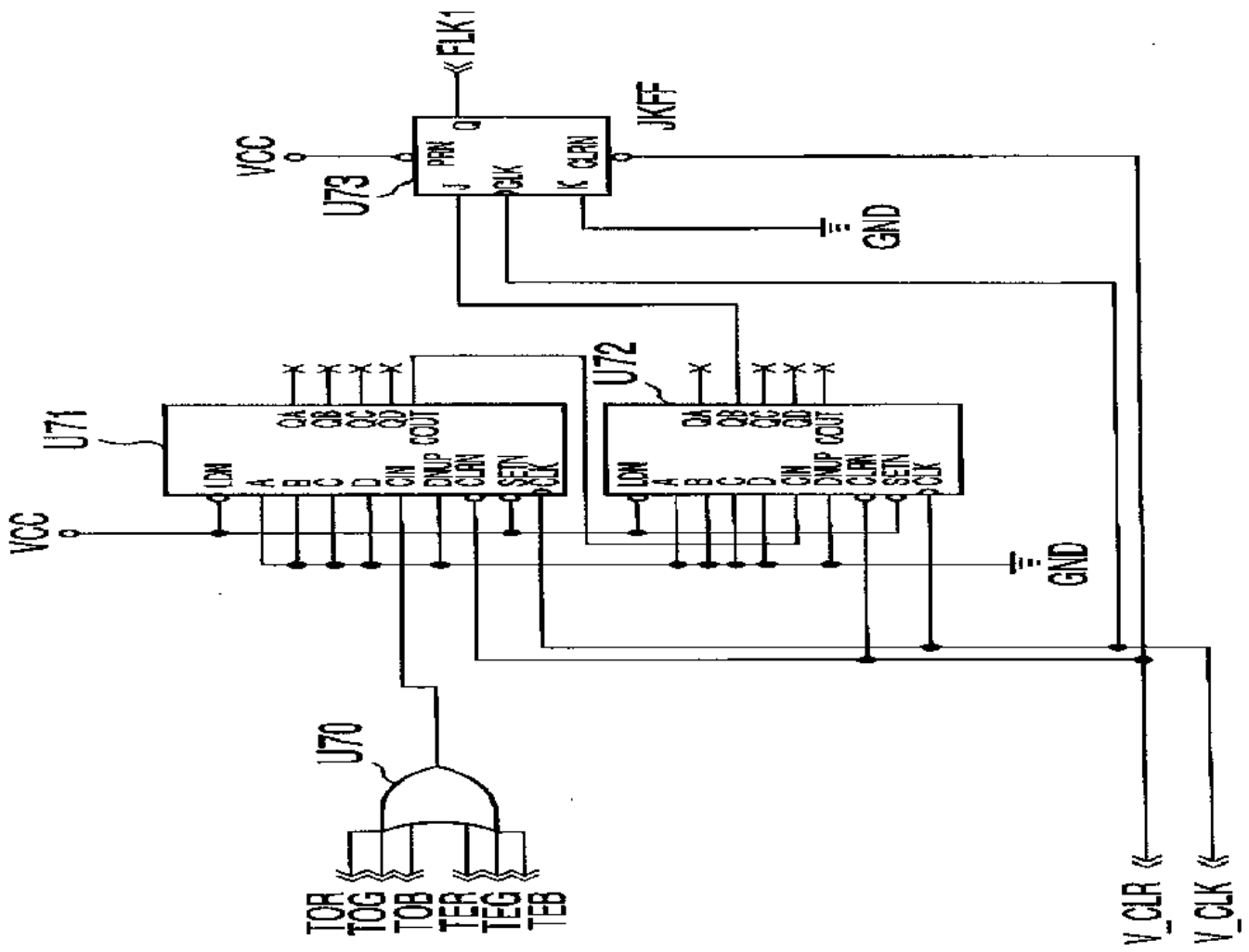


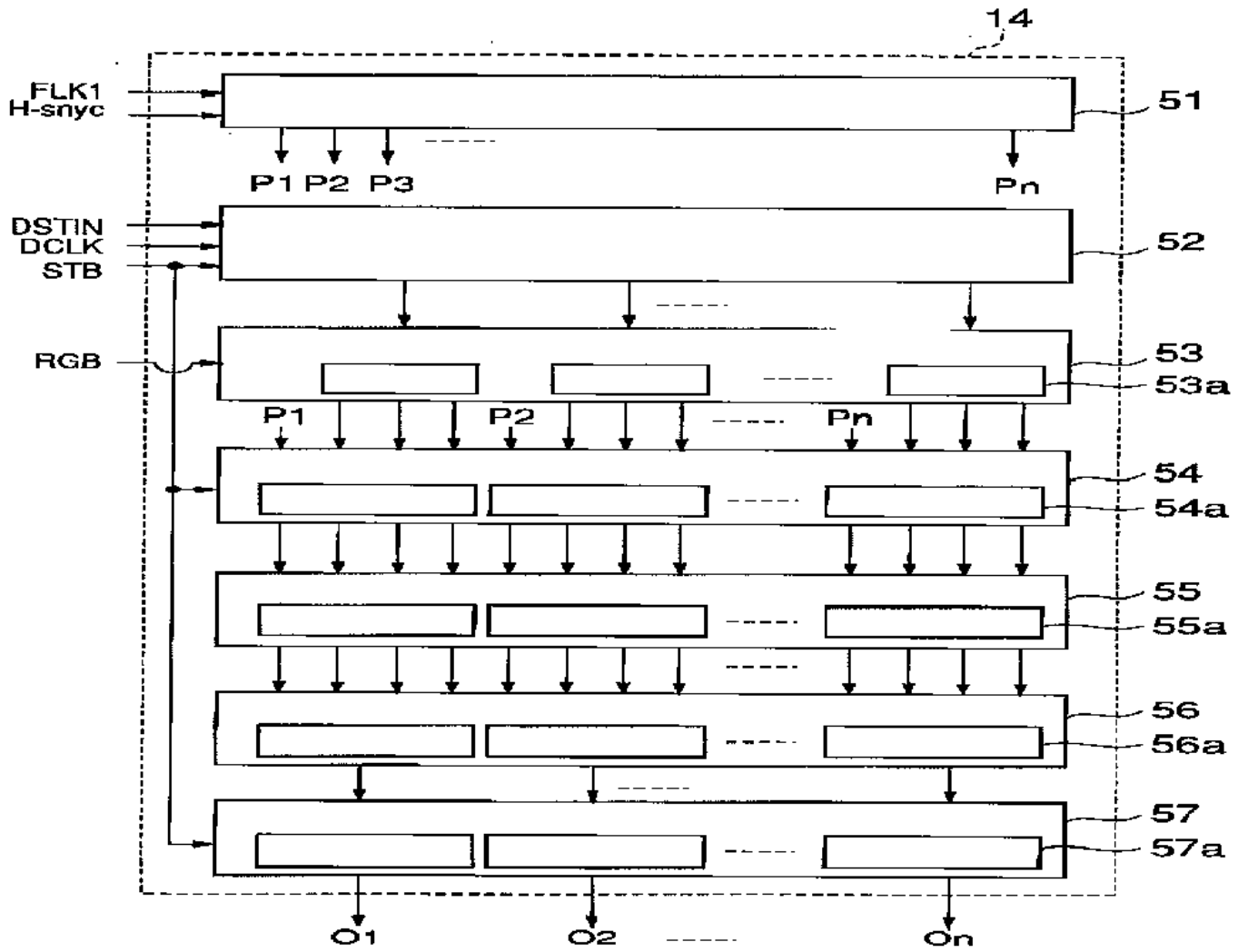




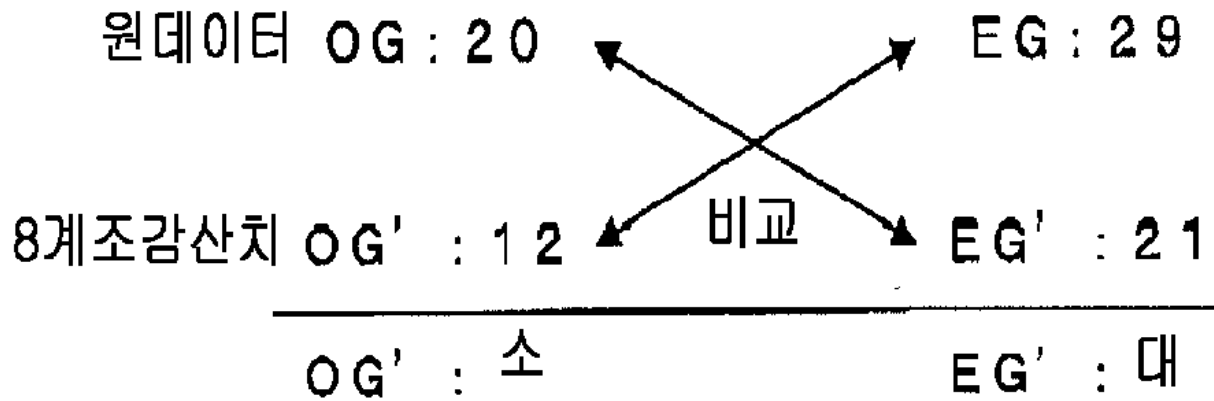




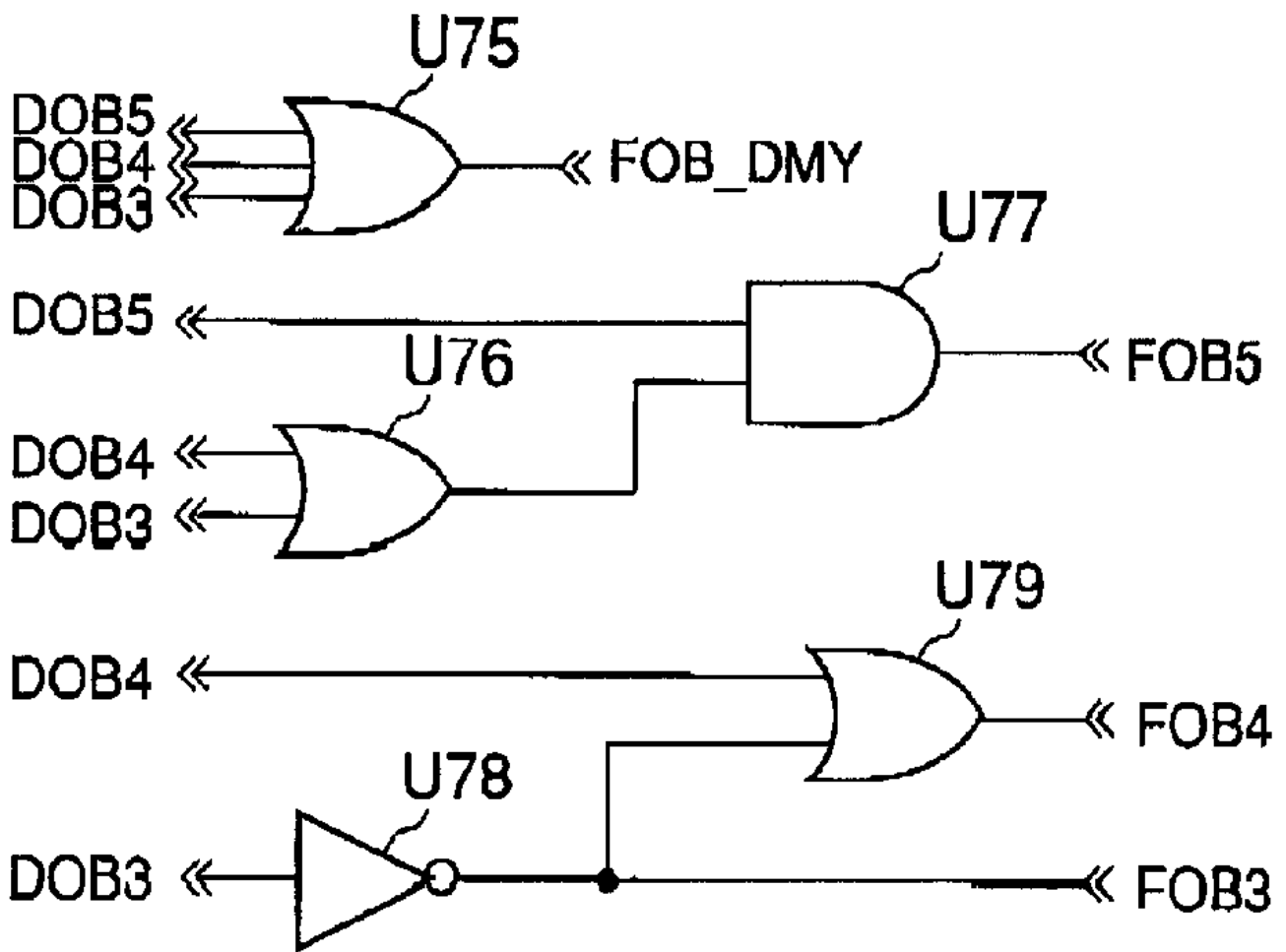




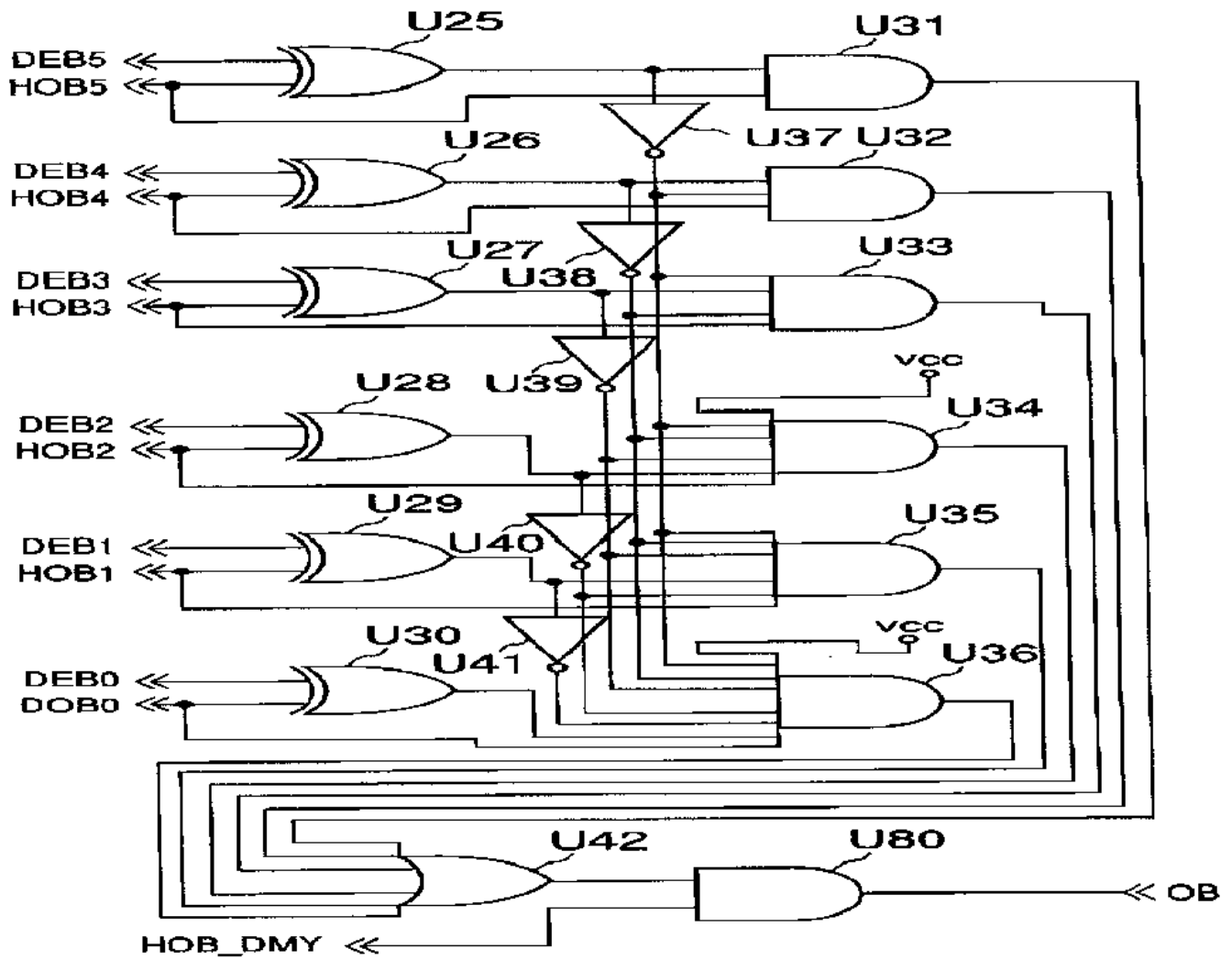
27

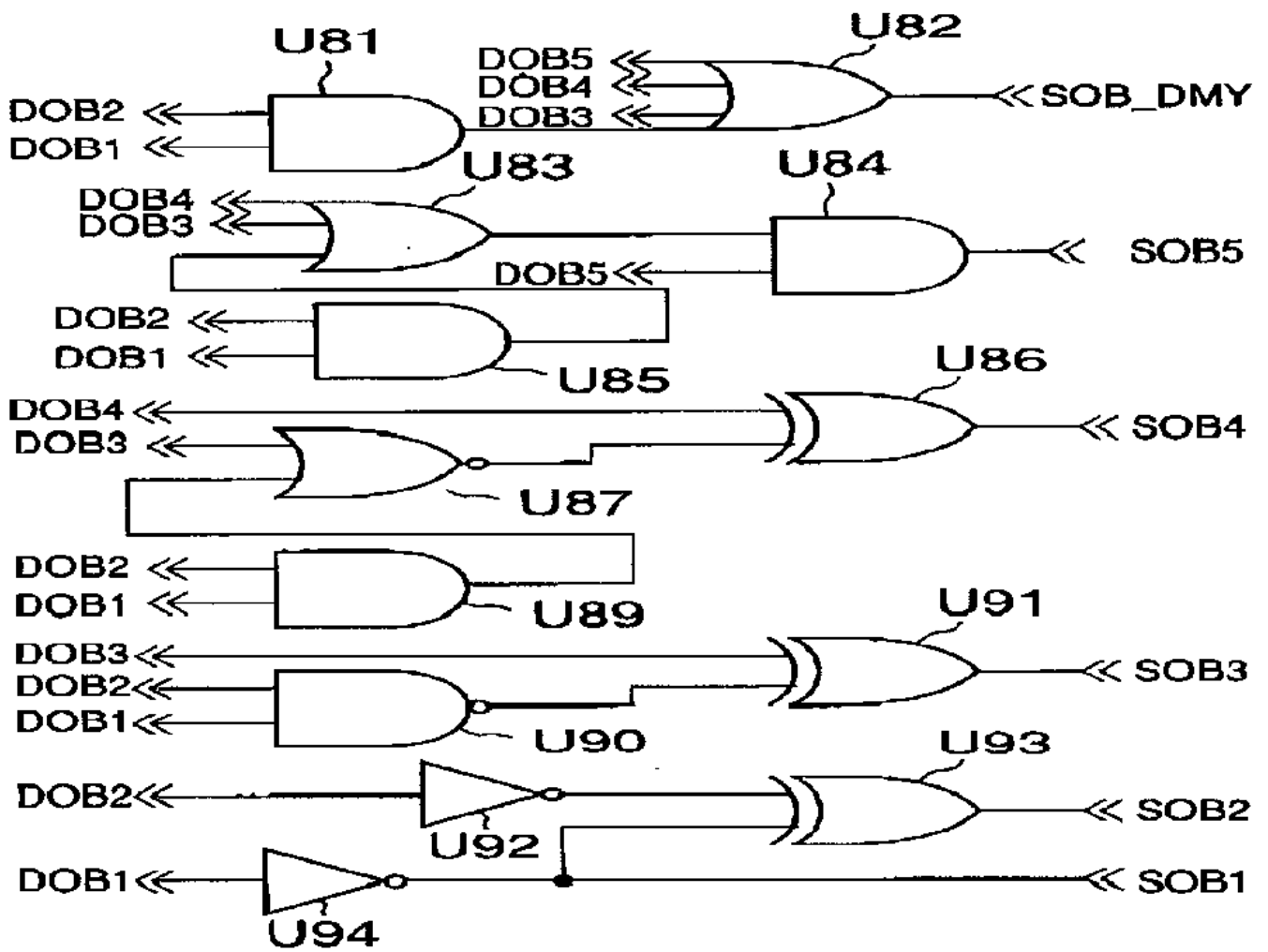


OG' : 소, EG' : 대, EG가 커서 9계조차 이상임
 OG' : 대, EG' : 소, OG가 커서 9계조차 이상임
 OG' : 소, EG' : 소, 9계조차 미만
 OG' : 대, EG' : 대, 있을 수 없음

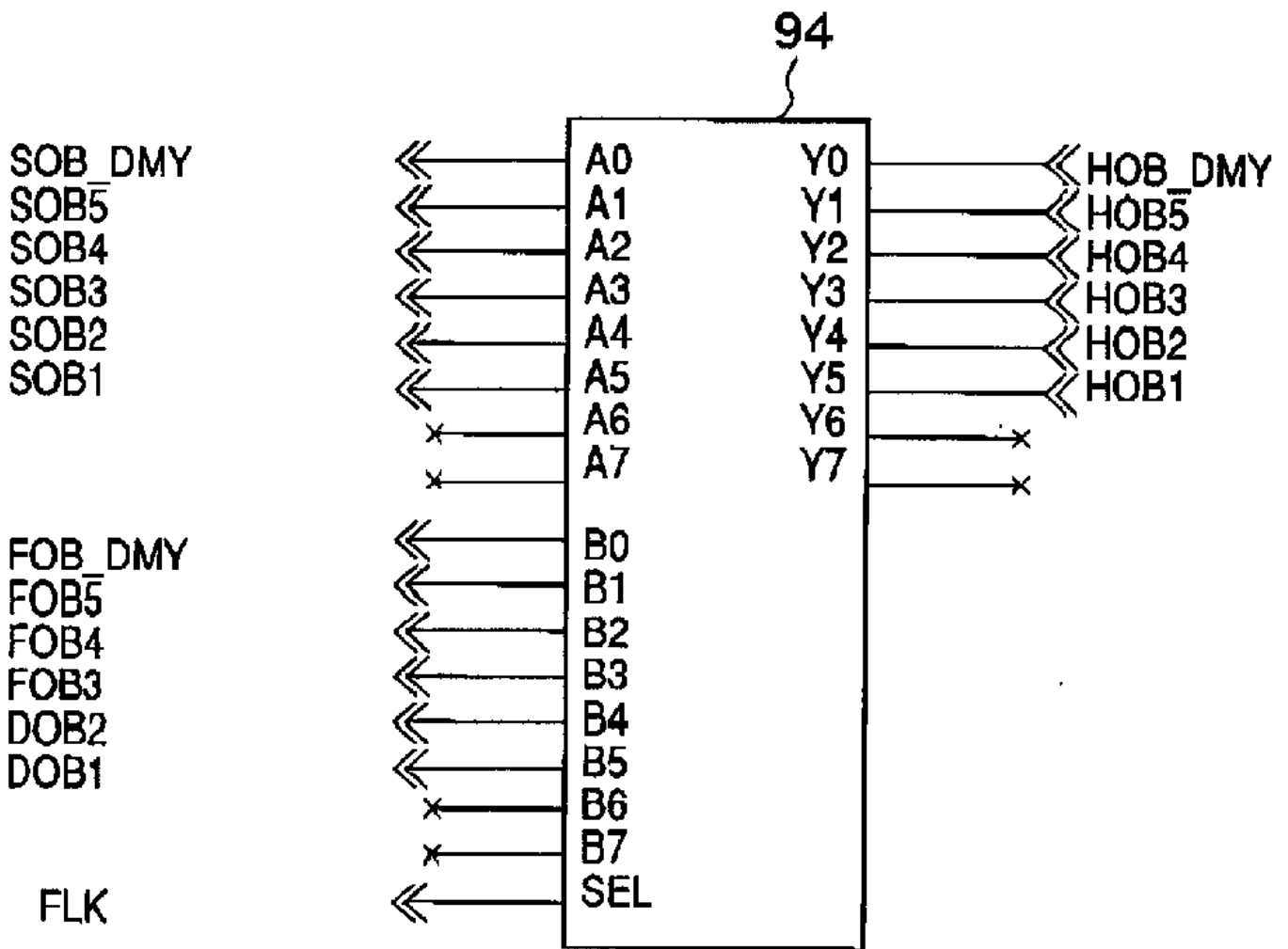


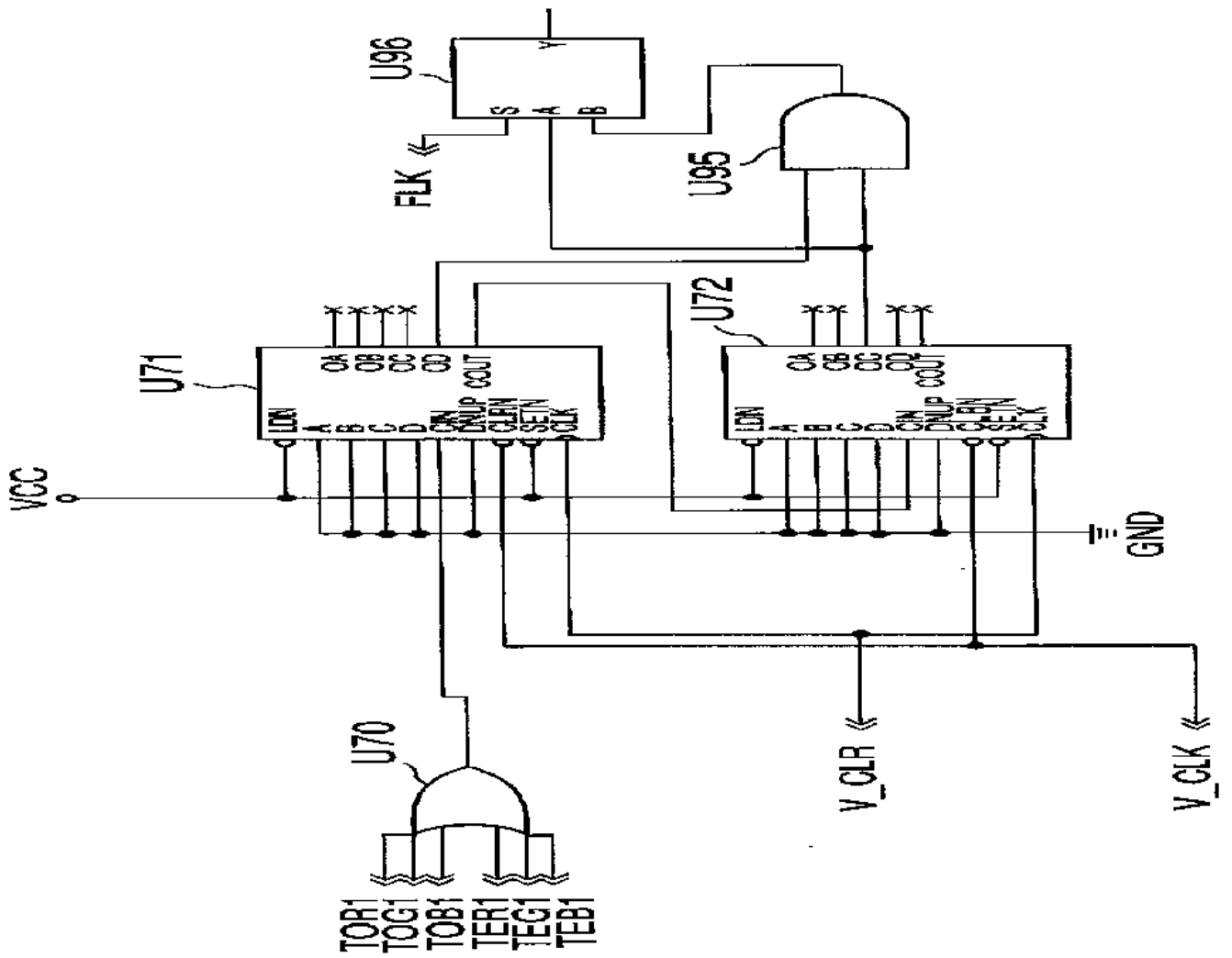
29





31





20계조 (-) (비점등)	125계조 (+) (점등)
125계조 (+) (점등)	20계조 (-) (비점등)

a

33계조 (-) (점등)	25계조 (+) (점등)
250계조 (+) (점등)	33계조 (-) (점등)

b

2 0 계 조 (-) (비점등)	125 계 조 (+) (점등)
125 계 조 (+) (점등)	2 0 계 조 (-) (비점등)

a

3 3 계 조 (-) (비점등)	250 계 조 (+) (점등)
250 계 조 (+) (점등)	3 3 계 조 (-) (비점등)

b

专利名称(译)	液晶显示器，驱动方法和驱动电路		
公开(公告)号	KR1020010062355A	公开(公告)日	2001-07-07
申请号	KR1020000075606	申请日	2000-12-12
[标]申请(专利权)人(译)	夏普株式会社		
申请(专利权)人(译)	夏普株式会社		
当前申请(专利权)人(译)	夏普株式会社		
[标]发明人	FUKUTOKU SYOUICHI 후쿠도쿠쇼우이찌 NUKIYAMA KAZUHIRO 누키야마가즈히로		
发明人	후쿠도쿠쇼우이찌 누키야마가즈히로		
IPC分类号	G09G3/36 G02F1/133 G09F G09G G09F9/00 G09G3/20 G02F G09F9/35		
CPC分类号	G09G2320/0247 G09G3/3648 G09G3/3688 G09G3/3614		
代理人(译)	MOON, KI桑		
优先权	1999354206 1999-12-14 JP		
其他公开文献	KR100718170B1		
外部链接	Espacenet		

摘要(译)

本发明的目的是提供一种液晶显示装置，驱动方法和驱动电路，其能够防止闪烁的发生并避免不必要的极性图案切换。 在甚至基于判定部41的本发明检测连图像数据的类型来在水平方向上相邻的像素被提供到所述两个相同颜色的像素，并且当超过预定的系统中，即使像素的像素的第二与灰度的大小关系相同的尺寸关系的在水平方向上从相同的图案检测器43和横向图案数计数部(44)之间的大小关系检查是否超过一定数目更多个连续。并且如果多于一定数量是连续的，并调查多个能在纵向方向上连续的线的大小关系，以及确定由所述结果存在或不存在闪烁。当存在这样的担忧，并发生在闪烁的多个帧，通过改变极性图案切换信号(FLK)，从而切换极性图案，用于确定要提供给从数据驱动器的LCD面板的图像数据的极性。

- 1 - 11 指数方面 极地图案，闪烁

