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(71)

.

20

(72)

1 401-36

LG

B 610

LG

B 615

(74)

:

(54)

,

.

6

,

1

2a 2b

3a	3b	.	
4a	4b	.	
5a	5b	.	
6	1	.	
7	6	.	
8a	8b	6	.
9a	9b	6	.
10	6	.	
11a	11b	6	.
12	2	.	
13a	13b	12	.
14	3	.	
15a	15b	14	.
16a	16b	14	.
17a	17b	14	.
18	4	.	
19	5	.	
20a	20b	19	.
21	6	.	
22	7	.	
23a	23b	22	.
24a	24b	22	.
25a	25b	22	.
26	8	.	
27a	27b	26	.

< >

2,12,112,132,172,252 :

4,14,114,134,174,254 :

6,16,116,136,176,256 :

18,118,138,178,256 :

71,121,141,181,261 :

72,122,142,182,262 :

73,123,143,183,263 : 74,124,144,184,264 :

101 : 102 :

103 : DAC 104 : MUX

105 : 145,185 :

146,186 :

Im Transistor; 'TFT')가 (Thin Fi
(Passive Matrix) (Active Matrix)

1 (2) (2) (DL1 D
Lm) , (6) , (2) (GL1 GLn)

(4)

(2) (2) m×n (Clc)
(GL1 GLn) , (2) m (DL1 DLm) n
(DL1 DLm) (Clc) TFT가 TFT
(GL1 GLm) TFT TFT
(DL1 DLm) TFT (Clc) (Clc)

(4) (4)
(GL1 GLn) (Clc)

TFT (4) TFT (DL1 DL
m) (Clc)

(6) (DL1 DLm) 가
1 1 (6)

가 (Inversion System)'

), (Line Inversion System), (Frame Inversion System
ot Inversion System) (Column Inversion System) (D

2a (odd) , 2b
(even) 가
(flicker)가

3a

3b

(Crosstalk)가

가

4a

4b

가

가

5a

5b

가

(6)

가 가

1
2
2

2
;

1

1

1

;

; 2

3

1

2

; 2

3

6

27b

6

1

6

1

(1

2)

(DL1

DLm+1)

(GL1

GLn)

(16)

(14)

(12)

(16)

(18)

(12)

c)

(GL1

GLn)

(12)

m+1

(Clc)

(12)

m×n

(Cl

(DL1

DLm+1)

n

. TFT

(11)

(GL1

GLn)

(DL1

DLm)

(Clc)

TFT (11)

(DL1

DLm)

(GL1, GL3, GL

5...GLn-1)

TFT (11)

(DL2

DLm+1)

(GL2, GL4, GL6, ..., GLn)

. TFT (11)

(GL1

GLm)

TFT (11)

1

m

(DL1

DL

m)

TFT (11)

2

m+1

(DL2

DLm+

1)

TFT (11)

TFT (11)

(Clc)

(13)

(Clc)

(13)

(DL1

DLm)

(Clc)

(Clc)

(DL2

DLm+1)

TFT (11)

(Zig-zag)

TFT(11)

(Clc)

(18)

(16)

(16)

(14)

(SSC),

(18)

(SSP),

/

(H,V)

(16)

OE)

(14)

(GOE)

C)

(POL)

(GSP),

(S

(GS

(14)

(GOE)

(18)

(GL1

GLn)

(GSP),

(GSC)

TFT(11) (14) 가

(Clc)

(16) (18) (SSC), (SSP), (P

OL) (SOE) (18) m (16

) m

가

(18) (16)

(16) m+1

m+1 (DL1 DLm) , m+1

m (RGB) 1

m (12)

1

(12) 6

2 (DL2) 3 (DL3) n

2 (DL2) (G21) . n

3 (DL3) (16) (G22) . n

(DL2) (16) (G23) 2

(n+1) 2 (DL2) (G21)

. (n+1)

3 (DL3) (16) (G22)

. (n+1) (16) (G23)

2 (DL2)

, n

(12) (DL1,DL3,DL5...)

(DL2,DL4,DL6...) (DL1,DL3,DL5...) . (n+1)

(DL2,DL4,DL6...)

, (BK) m 가 1 (DLm+1) (BK) n

1 (DL1) m+1 가 (DL1) m+1 (DLm+1)

, 가 1 가 (DL1) . (n+1) (DL1)

, (BK) 가 m+1 가 (DLm+1) 1 (DL1)

(18) (16)

7

7 가 (18) / (H,V)가 (71) , (73)

가 (72) , (72)

(, 'MUX')(74)

(71) / (V,H) (MCLK) (14)
 (GSP), (GSC) (GOE)
 (16) (DE), (SSC),
 (SSP), (POL) (SOE) MUX(74)
 (71) (72)

(72) (71)
 3 6
 72) 3 6
 MUX(74)
 (DE) MUX(74) (73) (72) (DE)
 (BK) (BK) (BK)
 [m/()]+1 (R,G,B) (BK)
 (73) (72) 3 6

MUX(74) (71) /
 (72) m 1
 , MUX(74) (72) m
 (BK)가 (73)

8a 8b 3 (16)

8a , (18) 1 (DOB1) m/3
 (R1,R2,R3,...,Rm/3) (16) 2 (DOB2)
) m/3 (G1,G2,G3,...,Gm/3) (16) (B1,B2,
 B3,...,Bm/3) (18) 3 (DOB3) m/3
 (DOB1,DOB2,DOB3) (16) m 가 1 3
 (DOB1) (BK) (16) (18) 1
 (16) (DE) , 1 3 (DOB1,DOB2,DOB3) m
 , 1 (DOB1) (R1,R2,R3,...,Rm/3, G1,G2,G3,...,Gm/3, B1,B2,B3,...,Bm/3)가
 , 1 (BK)가

, (18) 8b 가
 1 (DOB1)

(73)

8b , (18) 1 (DOB1) (73)
) (BK) (16) (73) m/3 (1
 (B1,B2,B3,...,Bm/3) (16) (R1,R2,R3,...,Rm/3) (1
 8) 2 (DOB2) m/3 (G1,G2,G3,...,
 (16) , 3 (DOB3) m/3 (DE) ,
 Gm/3) (16) (BK)가
 1 2 3 (DOB1) (73) (R1)
 (DOB2,DOB3)
 (G1)가 , (16) 1 (DOB1)
 (73) m/3 (B1,B2,B3,...,Bm/3)가
 2 3 (DOB2,DOB3) (R2,R3,...,Rm/3, G2,
 G3,...,Gm/3)가

, (18) 3 3

(16)

(16)

1/2

9a 9b 6 (16)

9a , (18) 1 (ODOB1) m/6
 (OR1,OR2,OR3,...,ORm/6) (16) 2
 (ODOB2) m/6 (OG1,OG2,OG3,...,OGm/6)
 (16) (18) 3 (ODOB3) m
 /6 (OB1,OB2,OB3,...,OBm/6) (16) ,
 (18) 1 (EDOB1) m/6
 (ER1,ER2,ER3,...,ERm/6) (16) 2 (E
 DOB2) m/6 (EG1,EG2,EG3,...,EGm/6) (16)
 (18) 3 (EDOB3) m/6
 (EB1,EB2,EB3,...,EBm/6) (16) m/2
 m/2 가 1 3 (ODOB1,ODOB2,
 ODOB3) 1 3 (EDOB1,EDOB2,EDOB3) (16)
 (18) 1 (ODOB1) (BK)
 (16) (DE) , m
 (OR1,OR2,OR3,...,ORm/6, OG1,OG2,OG3,...,OGm/6, OB1,OB2,OB3,...,OBm/6, ER
 1,ER2,ER3,...,ERm/6, EG1,EG2,EG3,...,EGm/6, EB1,EB2,EB3,...,EBm/6,)가 (B
 K)가

(18) 9b 가
 1 (ODOB1)
 (73)

9b (18) 1 (ODOB1)
 (73) (BK) (16) (73) m/
 6 (EB1,EB2,EB3,...,EBm/6) (16) (OR
 (18) 2 (ODOB2) m/6
 1,OR2,OR3,...,ORm/6) (OG1,OG2,OG3,...,OGm/6) (16) (ODOB3) m/6
 (OB1,OB2,OB3,...,OBm/6) (18) 1 (EDOB1) m/6
 (EDOB2) m/6 (ER1,ER2,ER3,...,ERm/6) (18) 2
 (16) 3 (EDOB3) m/6
 (EG1,EG2,EG3,...,EGm/6) (16) (16)
 (BK)가 1 (ODOB1) (73)
 2 3 (ODOB2,ODOB3)
 (OR1,OG1)가 1 3 (EDOB1,EDOB2,E
 DOB3) (OB1)
 (ER1,EG1)가 (16) 1 (ODOB1) ((73)
 3 m/6 (EB1,EB2,EB3,...,EBm/6)가 2
 (ODOB2,ODOB3) 1 3 (EDOB1,EDOB2,EDOB3)
 (OR2,OR3,...ORm/6,OG2,OG3,...OGm/6,OB2,OB3,...OBm/6)
 (ER2,ER3,...ERm/6,EG2,EG3,...EGm/6)가

8a 9b (16) 6 8

10 6 (16)

10 , (16) (101) (DL1 DLm+1)
 (102), MUX (103), / (, 'DAC'
)(104) (105)

(101) (18) (SSP) (SSC)

(102) (101) (18)

(R,G,B) (BK) 1

(102) (18) (SOE)

1

MUX (103) (102) (102) 가 ,

MUX (103) (102) 1 , MUX (103) (102)

1

DAC (104) MUX (103) (18) (POL)

(GH) (GL) (GH) , DAC (104) MUX (10

3) (GL) (GL) , MUX (GH)

(103)

MUX (103) DAC (104) (DL1 DLm+1)

(105)

(16) (DL1,DL3,DL5,...,DLm-1,DLm+1) n

가 , (n+1) 가 ,

(DL2,DL4,DL6,...,DLm) n 가 ,

(n+1) 가 (12) TFT가

(12)

11a 11b n (n+1) , 6 (DL1

DLm+1)

11a , n (1H,3H,...(n-1)H) , 1

m (DL1 DLm) (BK) m+1 (

DLm+1) n (2H,4H,...nH) , 2

m+1 (DL2 DLm+1) (BK) 1 (

DL1) n (DL1,DL3,DL5,...,DLm-1,DLm+1)

가 , (DL2,DL4,DL6,...DLm-2,DLm) 가

(n+1) 11b (DL1 DLm+1)

11b , (n+1) (1H,3H,...(n-1)H) n

(1H,3H,...(n-1)H) , 1 m (DL1 DLm)

(BK) m+1 (DLm+1) (n+1)

(2H,4H,...nH) n (2H,4H,...nH) (BK)

2 m+1 (DL2 DLm+1) , (DL1,DL3,DL5,...,D

1 (DL1) (n+1) , (DL2,DL4,DL6,...DLm-2,DLm)

Lm-1,DLm+1) 가

12 2

12 , 2 TFT (111) 2 m+1

(DL2 DLm+1) TFT (111) 1

m (DL1 DLm) TFT (112) (112) (GL1 GLn) (114)
, (112) (116) (DL1 DLm+1) (118) (116) , (114)
114) (116) (118) .
(112) m+1 (DL1 DLm+1) n (GL1 GLn)
(Clc) TFT (111) TFT (111)
(DL2 DLm+1) (GL1, GL3, GL5, ..., GLn-1) ,
TFT (111) (DL1 DLm) (GL2, GL4, GL6, ..., GLn)
. TFT (111) (GL1 GLm)
TFT (111) 2 m+1 (DL2 DLm+1) ,
TFT (111) 1 m (DL1 DLm)
TFT (111) (113) ,
TFT (111) (113) ,
(Clc) (DL2 DLm+1)
, (Clc)
(DL1 DLm) .
, TFT (111) TFT (111)
(Clc)
(118) (121), (122), (123) MUX(124)
, / (H,V) (MCLK) (116)
(14) (16)
(118) (121) / (V,H) (MCLK)
(114) (GDC) (SSP), (POL) (GSC) (GOE)
(SSC), (SSP), (POL) (SOE) (DE),
(DDC) / (OESW) (122) MUX(124)
(118) (122) (RGB) (121)
(BK) , (122) (BK) (RGB)
(122) 8a 8b 3 9a 9b 6
MUX(124) ,
MUX(124) (123) .
MUX(124) (122) m (RGB)
(123) /
(OESW) (122) m (RG
B) 1 .
(118) 3 (DOB1, DOB2, DOB3)
, 8b m (RGB)
(DOB1) (123) (BK) (DOB1, DOB2, DOB3)
(B1, B2, ..., Bm/3) . , 8a m
, 1), (G) 2 , (DOB2) (R) 1 (DOB
B3) (BK) (B) 3 (DO
1 (DOB1)

6 (ODOB1,ODOB2,ODOB3,EDOB1,EDOB2,EDOB3) 가
 , (118) 9b m (RGB)
 1 (ODOB1) (123) (BK)
) (EB1,EB2,...EBm/6) (118) 6
 (ODOB1,ODOB2,ODOB3,EDOB1,EDOB2,EDOB3)
 , 9a m (RGB)
 (BK) 1 (ODOB1)
 (114) (118) (GSP), (GSC)
 (GOE) (GL1 GLn)
 TFT(111) 가
 (114)
 (Clc)
 (116) 10 , MUX , DAC
 (SSP), (POL) (116) (SOE) (118) (SSC),
 m (118)
 (BK) (116) m (RGB)
 (116) m+1
 m+1 (DL1 DLm)
 13a 13b n (n+1) , 12 (DL1
 DLm+1)
 13a , n (1H,3H,...(n-1)H) , 2
 m+1 (DL2 DLm+1) (BK) 1
 (DL1) . n (2H,4H,...nH) , 1
 m (DL1 DLm) (BK) m+1 (DL
 1) . n (DL1,DL3,DL5,...,DLm-1,DLm+1)
 가 , (DL2,DL4,DL6,...DLm-2,DLm) 가
 (n+1) 13b (DL1 DLm+1)
 13b , (n+1) (1H,3H,...(n-1)H) n
 m+1 (1H,3H,...(n-1)H) , 2 m+1 (DL2 DL
 (BK) 1 (DL1) . (n+1)
 (2H,4H,...nH) n (2H,4H,...nH) ,
 1 m (DL1 DLm) (BK)
 m+1 (DLm+1) . (n+1) (DL1,DL3,DL5,...,DL
 m-1,DLm+1) 가 , (DL2,DL4,DL6,...DLm-2,DLm)
 가
 (BK)
 '000000' '00000000' 가 (BK) (16,116)
 (BK) (Clc) 가 (Vcom) 가
 (Clc) 가 (Normally white)
 (Black gray scale) (BK) (Clc) 가
 (Clc) 가 (Normally whit
 e) (White gray scale)

가, (Clc) 가 (BK)가 (DL1,DLm+1) 가 (Swing width) (DL1,DLm+1)
 가 (DL1,DLm+1) 가 (12,112) .

14 3 .

14 (DL1, DLm) TFT (131) 1 m
 (DL2, DLm+1) TFT (131) 2 m+1
 (132), (132) (GL1, GLn) ((

134), (132) (DL1, DLm+1) (136),
 (134) (136) (138) .

(132) m+1 (DL1, DLm+1) n (GL1, GLn)
 (Clc) TFT (131) TFT (131)
 (DL1, DLm) (GL1, GL3, GL5, ..., GLn-1)
 TFT (131) (DL2, DLm+1) (GL2, GL4, GL6, ..., GLn)
 TFT (131) (GL1, GLm)
 T (131) 1 m (DL1, DLm) , TF
 T (131) 2 m+1 (DL2, DLm+1) .
 TFT (131) (133),
 TFT (131) (133) (DL1, DLm) ,
 (Clc) (Clc)

(DL2, DLm+1) ,

(138) (RGB) (116)
 / (H,V) (MCLK) (136) , (134)
 (DDC,GDC) (DD1,DD2) (138) (DD1,DD2) (RGB)

(BK)가 .

(138) (141) , 가
 (142) , (145) , (142)
 (146), (143) MUX(144) .

(141) / (V,H) (MCLK) (134)
 (GSP), (GSC) (GOE) (GDC)
 (SSP), (POL) (SOE) MUX(144) (DDC) (SSC),
 (141) (142) /
 (OESW) .

(142) (RGB) (141)
 (142) (RGB) ,
 (143) MUX(144) (142) (145) m
 MUX(144) (RGB) , m 가 (142) m
 (146) . (142) (SSP)
 (146)

(146) 1 (DD1) (142) 1 m MUX(144) . , (14
 6) 2 (DD2) (142) 2 (DD2) (143) .

(143) (142)

2 (DD2) (143) (146)
 2 (DD2)
 MUX(144) (142) m (141) / (146) 1 (DD1)
 , MUX(144) MUX(144) (142) m 15a 16a
 2 (DD2) MUX(144) (143) 15
 b 16b
 (134) (138) (GSP), (GSC)
 (GOE) (GL1 GLn)
 TFT(131) 가
 (134)
 (Clc)
 (136) 10 (136) (138)
) m (138) (DDC) (DL1 DLm)
 1 (DD1) m+1 (DLm+1) (136)
 (138) m (RGB) 2 m+1 (DL2)
 DLm+1) , 2 (DD2) 1 (DL1) (13)
 6) m (RGB) (DD1,DD2)
 (RGB) (DD1,DD2)
 (116) m+1
 m+1 (DL1 DLm)
 15a 15b 3 (136) (R)
 GB) (DD1,DD2)
 15a , (138) 1 (DOB1) m/3 (DO
 B2) m/3 (R1,R2,R3,...,Rm/3) (16) 2 (DOB2) m/3
 (G1,G2,G3,...,Gm/3) (136) (DOB3) m/3 (B
 1,B2,B3,...,Bm/3) (DOB1,DOB2,DOB3) (136) 1 3
 (DOB1) 1 (DD1) (136) (Bm/3) (138) 1
 6) (DOB1,DOB2,DOB3) (DE) , 1 3 (1)
 ,...,Gm/3, B1,B2,B3,...,Bm/3)가 , 1 (DOB1) (R1,R2,R3,...,Rm/3, G1,G2,G3
 (Bm/3)가
 15a , 1 (DD1) 3 (DOB3) (Bm/3)
 (Bm/3)
 15b , (138) 1 (DOB1) 2
 (DD2) (R1) m/3 (B1,B2,B3,...,Bm/3) m/3
 (136) (R1,R2,R3,...,Rm/3) (138) 2 (DOB2) (DO
 B3) m/3 (G1,G2,G3,...,Gm/3) (136) , 3
 (136) (DE) , 1 (DOB1)
 (R1)가 2 3 (DOB2,DOB3)
 (R1) (G1)가 (136)
 1 (DOB1) (143) m/3 (B1,B2

,B3,...,Bm/3)가
(R2,R3,...,Rm/3, G2,G3,...,Gm/3)가 . (DOB2,DOB3)

15b , 2 (DD2) 2 (DOB2)
(R1)가 .

16a 16b 6 (136) (R
GB) (D1,D2) .

16a , (138) 1 (ODOB1) m/6
(OR1,OR2,OR3,...,ORm/6) (136) 2
(ODOB2) m/6 (OG1,OG2,OG3,...,OGm/6)
(136) . (138) 3 (ODOB3)
m/6 (OB1,OB2,OB3,...,OBm/6) (136)
(138) 1 (EDOB1) m/6
(ER1,ER2,ER3,...,ERm/6) (136) 2
(EDOB2) m/6 (EG1,EG2,EG3,...,EGm/6) ((

136) (EDO3) m/6
(EB1,EB2,EB3,...,EBm/6) (136) m/2
m/2 가 1 3 (ODO
(16)
B1,ODOB2,ODOB3) 1 3 (EDOB1,EDOB2,EDOB3)
(138) 1 (ODOB1) 1 (DD1)
(EBm/6) (136) (136)
(DE) , m (OR1,OR2,OR3,...,ORm/6, OG1,OG
2,OG3,...,OGm/6, OB1,OB2,OB3,...,OBm/6, ER1,ER2,ER3,...,ERm/6, EG1,EG2,EG3,...,EGm/6, EB1,EB2,EB3,...,
EBm/6)가 , 1 (DD1) (EBm/6)가 .

16b 가
(138) 1 (ODOB1)
2 (DD2) .

16b (138) 1 (ODOB1)
2 (DD2) (136) (73) m/6
(EB1,EB2,EB3,...,EBm/6) (136) . (13
8) 2 (ODOB2) m/6 (OR1,OR2,OR3,...,OR
m/6) (136) 3 (ODOB3) m/6
(OG1,OG2,OG3,...,OGm/6) (136) (EDOB1) m/6 (OB1,
(138) 1 (EDOB2) (136) (ER1,ER2,ER3,...,ERm/6) 2
(EDO3) m/6 (EG1
,EG2,EG3,...,EGm/6) (136)
, 1 (ODOB1) 2 (DD2)가 (136)
(ODOB2,ODOB3) (EDOB1,EDOB2,EDOB3) 2 3
(OB1) (ER1,EG1)가 ((

136) 1 (ODOB1) (143) m/6 (ODOB2,ODOB3)
(EB1,EB2,EB3,...,EBm/3)가 , 2 3
1 3 (EDOB1,EDOB2,EDOB3) ,
(OR2,OR3,...ORm/6,OG2,OG3,...OGm/6,OB2,OB3,...OBm/6) (ER2,
ER3,...ERm/6,EG2,EG3,...EGm/6)가 .

17a 17b n (n+1) , 14 (132) (

DL1 DLm+1) .

17a , n (1H,3H,...(n-1)H) , (R1,G1,
...,Bm/3) 1 m (DL1 DLm) , (Bm/3) m+1
(DLm+1) m+1 (DLm+1) (Bm/3) m (

(DLm) . n (

$2H, 4H, \dots, nH)$, $(R1, G1, \dots, Bm/3)$ 2 $m+1$ $(DL2 \quad DLm+1)$
 $1)$, $(R1)$ 2 $(DL2)$ 1 $(DL1)$ $(DL1)$
 $(DL1, DL3, DL5, \dots, DLm-1, DLm+1)$ $(R1)$. n
 $(DL2, DL4, DL6, \dots, DLm-2, DLm)$ 가 . 가
 $(n+1)$ 17b $(DL1 \quad DLm+1)$
 $17b$, $(n+1)$ $(1H, 3H, \dots, (n-1)H)$ n
 $(1H, 3H, \dots, (n-1)H)$, $(R1, G1, \dots, Bm/3)$ 1 m
 $(DL1 \quad DLm)$, $(Bm/3)$ $m+1$ $(DLm+1)$. $(n+1)$
 $1)$, $(2H, 4H, \dots, nH)$ n $(2H, 4H, \dots, nH)$
 $(R1, G1, \dots, Bm/3)$ 2 $m+1$ $(DL2 \quad DLm+1)$
 $(R1)$ 1 $(DL1)$. $(n+1)$, $(DL2, DL4, D$
 $(DL1, DL3, DL5, \dots, DLm-1, DLm+1)$ 가 , $(DL2, DL4, D$
 $L6, \dots, DLm-2, DLm)$ 가 .
18 4 .
18 , 4 $(153, 163)$ TFT $(151, 153)$
/ 가 (162) .
(162) $m+1$ $(DL1 \quad DLm+1)$ n $(GL1 \quad GLn)$
TFT TFT (161) $(DL1 \quad DLm+1)$
 $(GL1, GL3, GL5, \dots, GLn-1)$. TFT TFT
(151) $(DL1 \quad DLm+1)$ $(GL2, GL4, GL6, \dots, GLn)$ TFT
 $(GL1, GL3, \dots, GLn-1)$ TFT 가 TFT (161) $(GL1, G$
 $(GL2, GL4, \dots, GLn)$. TFT (151) TFT (161)
 $(DL1 \quad DLm+1)$ $(DL1 \quad DLm)$ TFT
TFT (151) TFT (161)
(163) , TFT (151)
 $(DL1 \quad DLm+1)$, (Clc)
(ClC) (DL1 $DLm+1$) , $(DL1 \quad DLm+1)$
. $(DL1 \quad DLm+1)$
(ClC) (163) 17a 17b
 $(Bm/3)$ (ClC) $(Bm/3)$.
(ClC) (153) 17a 17b (R1)
) , (R1) .
가 (ClC) 가 (C
lc)
 $(DL1)$ $m+1$ $(DLm+1)$
 $(DL1)$ $m+1$ $m+1$ $(DLm+1)$
 $(DL2 \quad DLm)$ 가 1 $(DL1)$ $(DL1)$ $m+1$ $(DLm+1)$
. , 1 $(DL1)$ $m+1$ $(DLm+1)$
. $(DL1)$ $m+1$ $(DLm+1)$
19 5 .
19 , 5 TFT (171) 2 $m+1$

(DL2 DLm+1) TFT (171) 1
 m (DL1 DLm) TFT (171)
 (174) , (172) , (172) (DL1 DLm+1) (GL1 GLn) (176) ,
 (174) (172) (176) (178) .
 (172) m+1 (DL1 DLm+1) n (GL1 GLn)
 (Clc) TFT (171) TFT (171)
 (DL2 DLm+1) (GL1, GL3, GL5, ..., GLn-1) ,
 TFT (171) (DL1 DLm) (GL2, GL4, GL6, ..., GLn)
 . TFT (171) (GL1 GLm)
 TFT (171) 2 m+1 (DL2 DLm+1) ,
 TFT (171) 1 m (DL1 DLm) .
 TFT (171) (173) ,
 TFT (171) (173) (DL2 DLm+1)
 , (Clc) , (Clc)
 (DL1 DLm) .
 (178) (RGB) (176) , (174)
 / (H,V) (MCLK) (176) (RGB)
 (DDC,GDC) , (178) (DD1,DD2)
 (178) (181) , 가
 (182) , (185) , (182)
 (186), (183) MUX(184) .
 (181) / (V,H) (MCLK) (174)
 (GSP), (GSC) (GOE) (GDC)
) (SSP), (POL) (SOE) (DE), (SSC),
 , (181) (182) MUX(184) /
 (OESW) .
 (182) (RGB) (181)
 (182) (RGB) ,
 (183) MUX(184) ,
 MUX(184) (182) (SSP)
 (186) .
) , m (182) 가 m (186) (RGB)
 (186) (182) 2 (DD2) (183) ,
 (146) 1 (DD1) (182) 1 m (DD1) MUX(183) .
 (183) (182) . , (183) (186)
 2 (DD2) 2 (DD2)
 MUX(184) (181) / (OESW)
 (182) m (183) 2
 (DD2) . MUX(184) 15b 16b .
 MUX(184) , m (186) 1 (D
 D1) . MUX(144) 15a 16a .

(174) (178) (GSP), (GSC)
 (GOE) (GL1 GLn)
 TFT(171) 가
 (174)
 (Clc)

(176) 10 (176)
 (178) (DDC) (178)
 m (RGB) 2 m+1 (DL2 DLm+1)
 , 2 (DD2) 1 (DL1) (176)
 (178) (DDC) (178) m
 (RGB) 1 m (DL1 DLm) , 1 (DD1)
 m+1 (DLm+1) (176) m (RGB)
 (DD1,DD2)
 (RGB) (DD1,DD2)

(176) m+1
 m+1 (DL1 DLm)

20a 20b n (n+1) , 19 (172) (

20a , n (1H,3H,...(n-1)H) , (R1,G1,
 ...,Bm/3) 2 m+1 (DL2 DLm+1) (R1)
 1 (DL1) (DL1) (R1) 2 (DL2)
 (R1)가 . n (2H,4H,...nH) ,
 (R1,G1,...,Bm/3) 1 m (DL1 DLm) ,
 m (Bm/3) m+1 (DLm+1) m+1 (DLm+1)
 (Bm/3) m (DLm) (Bm/3)가 . n
 , (DL1,DL3,DL5,...,DLm-1,DLm+1) 가
 , (DL2,DL4,DL6,...DLm-2,DLm) 가 .

(n+1) 20b (DL1 DLm+1)

20b , (n+1) (1H,3H,...(n-1)H) n
 (1H,3H,...(n-1)H) , (R1,G1,...,Bm/3) 2 m+1
 (DL2 DLm+1) (R1) 1 (D1) . (n+1)
 (2H,4H,...nH) n (2H,4H,...nH)
 , (R1,G1,...,Bm/3) 1 m (DL1 DLm) ,
 (Bm/3) m+1 (DLm+1) . (n+1)
 (DL1,DL3,DL5,...,DLm-1,DLm+1) 가 , (DL2,DL4
 ,DL6,...DLm-2,DLm) 가 .

21 6

21 , 6 (193,203) TFT (191,203)
 / 가 (192)

(192) m+1 (DL1 DLm+1) n (GL1 GLn)
 TFT TFT (191) (DL1 DLm+1)
 (GL1,GL3,GL5,...,GLn-1) . TFT TFT
 (201) (DL1 DLm+1) (GL2,GL4,GL6,...,GLn) (GL1,G
 L3,...,GLn-1) TFT 가 TFT (191) (GL1,G
 (GL2,GL4,...,GLn) . TFT TFFT (191)

TFT (201) (DL1 DLm+1) (DL1 DLm) TFT
 (193) TFT (191) TFT (151) (Clc)
 (203) (DL1 DLm+1) (DL1 DLm+1)
 (Clc)
 (R1) (Clc) (193) 20a 20b
 (Clc) (203) 20a 20b (Bm/3) (Bm/3)
 가 (Clc) 가 (C)
 lc)
 (DL1) m+1 (DLm+1)
 (DL1) m+1 (DLm+1)
 (DL2 DLm) 가 1 (DL1)
) m+1 (DLm+1)
 m+1 (DLm+1)
 22 7
 22 7
 (DL1 DLm) TFT (211) 1 m
 (DL2 DLm+1) TFT (211) 2 m+1
 (212) (212) TFT (211)
 214) (214) (212) (DL1 DLm+1) (GL1 GLn) (216)
 (216) (218)
 (212) m+1 (DL1 DLm+1) n (GL1 GLn)
 (Clc) TFT (211) TFT (211)
 (DL1 DLm) (GL1, GL3, GL5, ..., GLn-1)
 TFT (211) (DL2 DLm+1) (GL2, GL4, GL6, ..., GLn)
 . TFT (211) (GL1 GLm)
 TFT (211) 1 m (DL1 DLm) TF
 T (211) 2 m+1 (DL2 DLm+1)
 TFT (211) (213)
 TFT (211) (213) (DL1 DLm)
 (Clc) (Clc)
 (DL2 DLm+1)
 (218) (RGB) (216)
 / (H,V) (MCLK) (216) (214)
 (DDC,GDC) (218) (216) (RGB)
 (DD1,DD2)
 (218) (221) 가
 (222) (225) (222)
 (226), (223) MUX(224)
 (221) / (V,H) (MCLK) (214)
 (GSP), (GSC) (GOE) (GDC)
 (136) (DE), (SSC),

(SSP), (POL) (222) (SOE) MUX(224) (DDC) / .

(221) (OESW) .

(222) (RGB) (221)

(222) (RGB) ,

MUX(224) (223) MUX(224) (222) (225)

(RGB) , m 가 m

(226) , (222)

(SSP) (22) 6)

(226) (222) m 1

(226) 1 (DD1) 1 (DD1) MUX(224)

(226) 2 (DD2) 2 (DD2) 1 (223)

(223) (222)

2 (DD2) 2 (223) (226) (DD2)

MUX(224) (221) / (OESW)

(222) m (RGB) (226) 1

(DD1) MUX(224) (222) m 23a 24

a , MUX(224) (223)

23b 24b 2 (DD2) MUX(224)

(214) (218) (GSP), (GSC)

(GOE) (GL1 GLn) 가

TFT(211) (214)

(Clc)

(216) 10 (218) (DDC) (216) (218)

m (RGB) 1 m (DL1 DLm)

1 (DD1) m+1 (DLm+1) (216) m+1 (DL2) (21

(218) m (RGB) 2 (DL1)

DLm+1) , 2 (DD2) 1 (DD1,DD2)

6) m (RGB) (DD1,DD2)

(216) m+1 (DL1 DLm)

23a 23b 3 (216) (RGB)

(DD1,DD2)

23a , (218) 1 (DOB1) m/3

(R1(H),R2(H),R3(H),...,Rm/3(H)) (16) 2

(DOB2) m/3 (G1(H),G2(H),G3(H),...,Gm/3(H)) (218) 3 (DOB3) m/3

(216)

$(B1(H), B2(H), B3(H), \dots, Bm/3(H))$ (216) m
 가 1 3 $(DOB1, DOB2, DOB3)$ (216)
 (218) 1 $(DOB1)$ 1 $(DD1)$ $(Bm/3(H-1))$ 가 (B
 $m/3(H-1))$ (216) (DE) , 1 3
 $(DOB1, DOB2, DOB3)$ m , $(R1(H), R2(H), R3(H), \dots, R$
 $m/3(H), G1(H), G2(H), G3(H), \dots, Gm/3(H), B1(H), B2(H), B3(H), \dots, Bm/3(H))$ 가 , 1 (D
 $OB1)$ $(Bm/3(H-1))$ 가 .

23b , (218) 1 $(DOB1)$ 2
 $(DD2)$ $m/3$ $(B1(H+1), B2(H+1), B3(H+1), \dots, Bm/3(H+1))$
 (216) . 2 $(DD2)$ $(R1(H-1))$ 가 $(R1(H)$
 (218) (226) 1 (218) 2 $(DOB2)$ $m/3$
 $(R1(H+1), R2(H+1), R3(H+1), \dots, Rm/3(H+1))$ (216) , 3
 $(DOB3)$ $m/3$ $(G1(H+1), G2(H+1), G3(H+1), \dots, Gm/3(H+1))$
 (216) , (216) (DE) , 1
 $(DOB1)$ $(R1(H))$ 가 2
 3 $(DOB2, DOB3)$ $(R1(H+1))$
 $(G1(H+1))$ 가 , (216) 1 $(DOB1)$
 (223) $m/3$ $(B1(H+1), B2(H+1), B3(H+1), \dots, Bm/3(H+1))$ 가
 2 3 $(DOB2, DOB3)$ $(R2(H+1),$
 $R3(H+1), \dots, Rm/3(H+1), G2(H+1), G3(H+1), \dots, Gm/3(H+1))$ 가 .

24a 24b 6 (216) (RG
 B) $(DD1, DD2)$.

24a , , (218) 1 $(ODOB1)$ m
 $/6$ $(OR1(H), OR2(H), OR3(H), \dots, ORm/6(H))$ (216)
 2 $(ODOB2)$ $m/6$ $(OG1(H), OG2(H),$
 $H), OG3(H), \dots, OGm/6(H))$ (216) , (218) 3
 $(ODOB3)$ $m/6$ $(OB1(H), OB2(H), OB3(H), \dots, OBm/$
 $6(H))$ (216) , (218) 1
 $(EDOB1)$ $m/6$ $(ER1(H), ER2(H), ER3(H), \dots, ERm/6(H))$
 (216) 2 $(EDOB2)$ $m/6$
 $(EG1(H), EG2(H), EG3(H), \dots, EGm/6(H))$ (216) ,
 (218) 3 $(EDOB3)$ $m/6$ (
 $EB1(H), EB2(H), EB3(H), \dots, EBm/6(H))$ (216) $m/2$
 $m/2$ 가 1 3 $(ODOB1, ODOB2, ODOB3)$
 1 3 $(EDOB1, EDOB2, EDOB3)$ (216) ,
 (218) 1 $(ODOB1)$ 1 $(DD1)$ (216)
 (218) 1 $(DD1)$ $(EBm/6(H-1))$ 가 (B
 $m/6(H-1))$. (216) (DE) , m ,
 $(OR1(H), OR2(H), OR3(H), \dots, ORm/6(H), OG1(H), OG2(H), OG3(H), \dots, OGm/6(H), OB1(H)$
 $, OB2(H), OB3(H), \dots, OBm/6(H), ER1(H), ER2(H), ER3(H), \dots, ERm/6(H), EG1(H), EG2(H), EG3(H), \dots, EGm/6(H), EB1$
 $(H), EB2(H), EB3(H), \dots, EBm/6(H))$ 가 , 1 $(DD1)$ 가 .

, (218) 24b 가
 2 , $(DD2)$ 1 $(ODOB1)$

24b , (218) 1 $(ODOB1)$
 2 $(DD2)$ (216) (223) $m/6$
 $(EB1(H+1), EB2(H+1), EB3(H+1), \dots, EBm/6(H+1))$ (216) . 2
 $(DD2)$ $(OR1(H))$ 가 (218)
 (226) 1 $(OR1(H))$.
 (218) 2 $(ODOB2)$ $m/6$

$(OR1(H+1), OR2(H+1), OR3(H+1), \dots, OR_{m/6}(H+1))$
 $(ODOB3) \quad m/6$
 $m/6(H+1))$
 $(EDOB1) \quad m/6$
 $+1), \dots, OB_{m/6}(H+1))$
 $(EDOB2) \quad m/6$
 $/6(H+1))$
 $(EG1(H+1), EG2(H+1), EG3(H+1), \dots, EG_{m/6}(H+1))$
 $(DD2)가$
 $(DOB1, EDOB2, EDOB3)$
 $(ER1, EG1)가$
 $B1) \quad (223) \quad m/6$
 $H+1), \dots, EB_{m/3}(H+1))가$
 $(EDOB1, EDOB2, EDOB3)$
 $OR3(H+1), \dots, OR_{m/6}(H+1), OG2(H+1), OG3(H+1), \dots, OG_{m/6}(H+1), OB2(H+1), OB3(H+1), \dots, OB_{m/6}(H+1))$
 $(ER2(H+1), ER3(H+1), \dots, ER_{m/6}(H+1), EG2(H+1), EG3(H+1), \dots, EG_{m/6}(H+1))가$

$25a \quad 25b \quad n \quad (n+1) \quad 22 \quad (212) \quad ($
 $DL1 \quad DL_{m+1})$
 $25a \quad , n \quad (1H, 3H, \dots, (n-1)H) \quad , \quad (R1(1H)$
 $, G1(1H), \dots, B_{m/3}(1H), R1(31H), G1(3H), \dots, B_{m/3}(3H), \dots, R1((n-1)H), G1((n-1)H), \dots, B_{m/3}((n-1)H)) \quad 1$
 $m \quad (DL1 \quad DL_m) \quad (B_{m/3}(2H), B_{m/3}(4H), \dots, B_{m/3}((n-2)H)) \quad m+1 \quad (DL_{m+1}) \quad (DL_{m+1}) \quad (B_{m/3}(2H), B_{m/3}(4H), \dots, B_{m/3}((n-2)H)) \quad m+1 \quad (DL_{m+1}) \quad (B_{m/3}(2H), B_{m/3}(4H), \dots, B_{m/3}((n-2)H)) \quad m+1 \quad (DL_{m+1}) \quad (1H) \quad , \quad m+1$
 $(DL_{m+1}) \quad (nH) \quad (218) \quad (B_{m/3}) \quad , \quad (BK)$
 $, n \quad (2H, 4H, \dots, nH) \quad , \quad (R1(2H), G1(2H), \dots, B_{m/3}(2H), R1(4H), G1(4H), \dots, B_{m/3}(4H), \dots, R1(nH), G1(nH), \dots, B_{m/3}(nH)) \quad 2 \quad m+1 \quad (DL2$
 $DL_{m+1}) \quad (DL1) \quad 1 \quad (DL1) \quad (DL1) \quad (R1(1H), R1(3H), \dots, R1((n-1)H)) \quad 1$
 $(DL1) \quad 1 \quad (DL1) \quad (R1(1H), R1(3H), \dots, R1((n-1)H)) \quad (R1(1H), R1(3H), \dots, R1((n-1)H)) \quad (DL1, DL3, DL5, \dots, DL_{m-1}, DL_{m+1})$
 $, n \quad , \quad (DL2, DL4, DL6, \dots, DL_{m-2}, DL_m) \quad 가$

$(n+1) \quad 25b \quad (DL1 \quad DL_{m+1})$
 $25b \quad , (n+1) \quad (1H, 3H, \dots, (n-1)H) \quad n$
 $(1H, 3H, \dots, (n-1)H) \quad , \quad (R1(1H), G1(1H), \dots, B_{m/3}(1H), R1(31H), G1(3H), \dots, B_{m/3}(3H), \dots, R1((n-1)H), G1((n-1)H), \dots, B_{m/3}((n-1)H)) \quad 1 \quad m \quad (DL1 \quad DL_m)$
 $, \quad (B_{m/3}(2H), B_{m/3}(4H), \dots, B_{m/3}((n-2)H)) \quad m+1 \quad (DL_{m+1}) \quad (DL_{m+1}) \quad (21$
 $DL_{m+1}) \quad 1 \quad (1H) \quad m+1 \quad (DL_{m+1}) \quad (nH) \quad (B_{m/3}) \quad (BK) \quad , \quad (n+1) \quad (2H, 4H, \dots, nH) \quad n$
 $, \quad (R1(2H), G1(2H), \dots, B_{m/3}(2H), R1(4H), G1(4H), \dots, B_{m/3}(4H), \dots, R1(nH), G1(nH), \dots, B_{m/3}(nH)) \quad 2 \quad m+1 \quad (DL2 \quad DL_{m+1}) \quad (DL1)$
 $1) \quad , \quad (R1(1H), R1(3H), \dots, R1((n-1)H)) \quad 1 \quad (DL1, DL3, DL5, \dots, DL_{m-1}, DL_{m+1}) \quad 가$
 $, (n+1) \quad , \quad (DL2, DL4, DL6, \dots, DL_{m-2}, DL_m) \quad 가$

(DL2 DLm) 가 1 (DL1) m+1 (DLm+1)
 (DL1) m+1 (DLm+1)
 , .
 26 9 .
 26 , 9 TFT (251) 2 m+1
 (DL2 DLm+1) TFT (251) 1
 m (DL1 DLm) TFT (251)
 (254) , (252) , (252) (GL1 GLn)
 (254) (252) (256) (DL1 DLm+1) (256) ,
 (258) .
 (252) m+1 (DL1 DLm+1) n (GL1 GLn)
 (Clc) TFT (251) . TFT (251)
 (DL2 DLm+1) (GL1, GL3, GL5, ..., GLn-1)
 TFT (251) (DL1 DLm) (GL2, GL4, GL6, ..., GLn)
 . TFT (251) (GL1 GLm)
 TFT (251) 2 m+1 (DL2 DLm+1)
 TFT (251) 1 m (DL1 DLm)
 TFT (251) (253) ,
 TFT (251) (253) (DL2 DLm+1)
 , (Clc) , (Clc)
 (DL1 DLm) .
 (258) (RGB) (256) , (254)
 / (H,V) (MCLK) (256) (256)
 (DDC,GDC) (DD1,DD2) , (DD1,DD2)
 (RGB) .
 (258) (261) , 가
 (262) , (265) , (262)
 (266), (263) MUX(264) .
 (261) / (V,H) (MCLK) (254)
 (GSP), (GSC) (GOE) (GDC)
 (SSP), (POL) (256) (SOE) (DE), (SSC),
 (OESW) (262) MUX(264) /
 . (261) (262) (261)
 (262) (RGB) (RGB) ,
 (263) MUX(264) (262) (SSP)
 MUX(264) . (266)
 (262) (265) m (266)
 (RGB) , m 가 m
 .
 (266) (262) 1
 2 (DD2) 2 (DD2) MUX(264)
 , (266) (262) m
 1 1 (DD1) 1 (DD1)
 (263) .

(263) (262) (263) (266)
2 (DD2) 2 (DD2)

MUX(264) (262) m (261) / (OESW)
(DD2) MUX(264) (263) 23b 24b 2
MUX(264) (DD1) (RGB) MUX(264) 23a 1 24
a

(254) (258) (GSP), (GSC)
(GOE) (GL1 GLn) 가
TFT(251) (254)
(Clc)

(256) 10 (256) (258)
(258) (DDC) (RGB) 2 m+1 (DL2 DLm+1)
, 2 (DD2) 1 (DL1) (256) (258) m (DD1)
(258) (RGB) 1 m (DL1 DLm) (256) m (RGB)
m+1 (DLm+1) (DD1,DD2)
(RGB) (DD1,DD2)

(256) m+1
m+1 (DL1 DLm)

27a 27b n (n+1) , 26 (252) (
DL1 DLm+1)

27a , n (1H,3H,...(n-1)H) , (R1(1H)
,G1(1H),...,Bm/3(1H),R1(31H),G1(3H),...,Bm/3(3H),..., R1((n-1)H),G1((n-1)H),...,Bm/3((n-1)H)) 2
m+1 (DL2 DLm+1) (R1(2H),R1(4H),...,
R1((n-2)H)) 1 (DL1) 1 (DL1) (R1(2H),
R1(4H),..., R1((n-2)H)) 1 (DL1) (R1(2H),R1(4H),..., R1((n-2)H))
. 1 (1H) , 1 (DL1) (nH)
(258) , (n-1) (BK) . n
(R1) , (R1(2H),G1(2H),...,Bm/3(2H),R1(4H),G1(4H),...,Bm/3(4H),...,R1
(2H,4H,...nH) , (nH),G1(nH),...,Bm/3(nH)) 1 m (DL1 DLm) , m
(Bm/3(1H),Bm/3(3H),...,Bm/3((n-1)H)) m+1 (DLm+1) . m+1
(DLm+1) (Bm/3(1H),Bm/3(3H),...,Bm/3((n-1)H)) m+1
(DLm+1) (Bm/3(1H),Bm/3(3H),..., Bm/3((n-1)H)) m+1
. n (DL1,DL3,DL5,...,DLm-1,DLm+1)
가 , (DL2,DL4,DL6,...DLm-2,DLm) 가 .

(n+1) 27b (DL1 DLm+1)

27b , (n+1) (1H,3H,...(n-1)H) n
(1H,3H,...(n-1)H) , (R1(1H),G1(1H),...,Bm/3(1H), R1(31H),G1(3H

),...,Bm/3(3H),..., R1((n-1)H),G1((n-1)H),...,Bm/3((n-1)H))² m+1 (DL2 DLm+1)
 (R1(2H),R1(4H),..., R1((n-2)H))¹ (DL1) (DL1)
 (1H) , 1 (DL1) (218)
 n (BK) (nH) (R1)
 (2H,4H,...nH) n
 (2H,4H,...nH) (R1(2H),G1(2H),...,Bm/3(2H), R1(4H),G1(4H)
 ,...,Bm/3(4H),..., R1(nH),G1(nH),...,Bm/3(nH))¹ m (DL1 DLm)
 (Bm/3(1H),Bm/3(3H),...,Bm/3((n-1)H))^{m+1} (DLm+1)
 (n+1) (DL1,DL3,DL5,...,DLm-1,DLm+1)
 가 , (DL2,DL4,DL6,...DLm-2,DLm) 가 .

10

21 1 (DL1)¹
 m+1 (DLm+1)
 (DL2 DLm) 가 1 (DL1) m+1 (DLm+1)
 (DL1) m+1 (DLm+1)
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TFT

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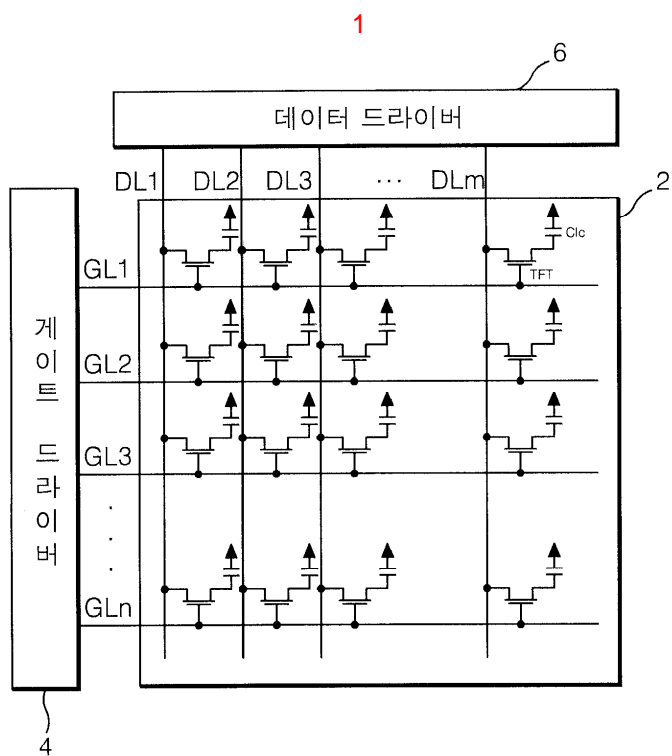
13

25.

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26.

13



2a

+	+	+	+	+	+	+	+
+	+	+	+	+	+	+	+
+	+	+	+	+	+	+	+
+	+	+	+	+	+	+	+
+	+	+	+	+	+	+	+
+	+	+	+	+	+	+	+
+	+	+	+	+	+	+	+
+	+	+	+	+	+	+	+

기수 프레임(프레임 인버전)

2b

-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

우수 프레임(프레임 인버전)

3a

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

기수 프레임(라인 인버전)

3b

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

우수 프레임(라인 인버전)

4a

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

기수 프레임(컬럼 인버전)

4b

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

우수 프레임(컬럼 인버전)

5a

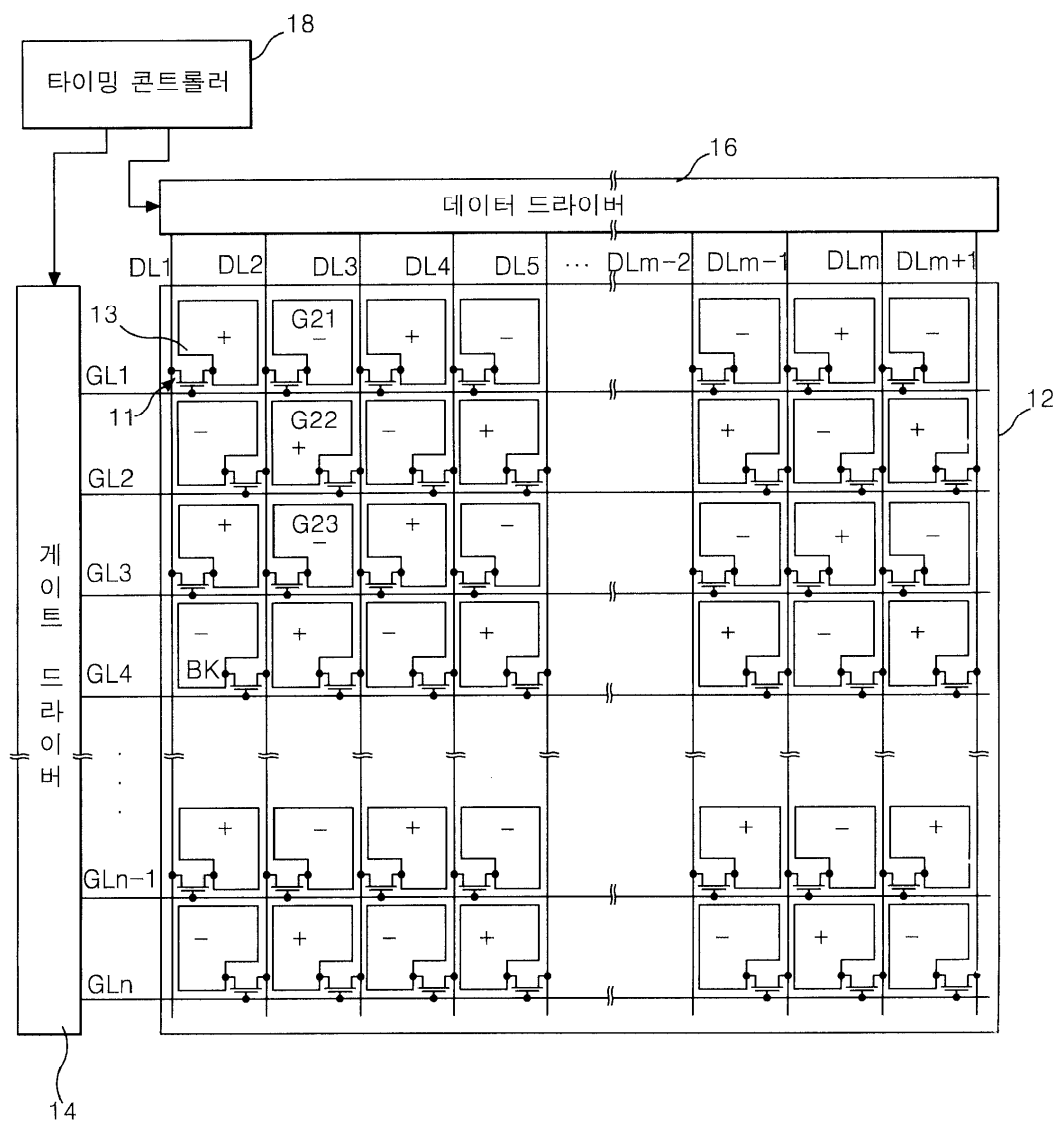
+	-	+	-	+	-	+	-
-	+	-	+	-	+	-	+
+	-	+	-	+	-	+	-
-	+	-	+	-	+	-	+
+	-	+	-	+	-	+	-
-	+	-	+	-	+	-	+
+	-	+	-	+	-	+	-
-	+	-	+	-	+	-	+

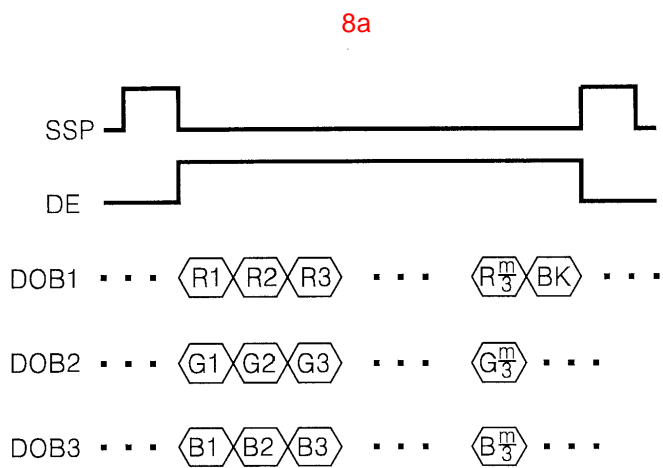
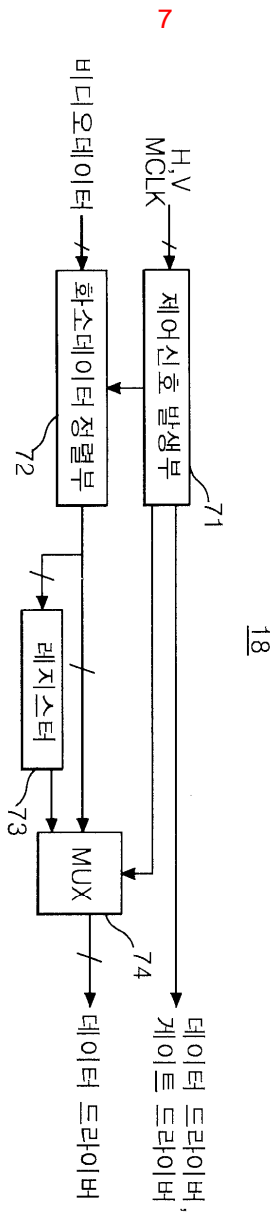
기수 프레임(도트 인버전)

5b

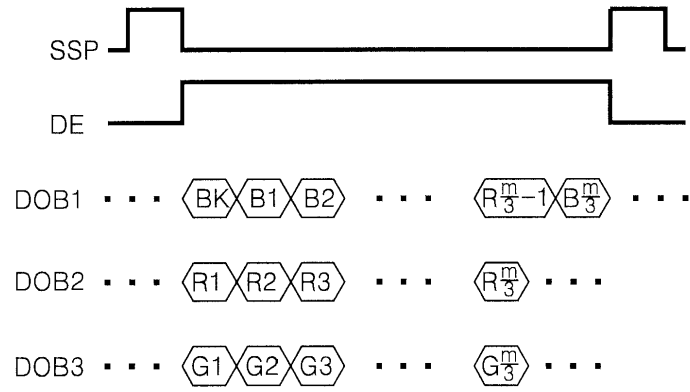
-	+	-	+	-	+	-	+
+	-	+	-	+	-	+	-
-	+	-	+	-	+	-	+
+	-	+	-	+	-	+	-
-	+	-	+	-	+	-	+
+	-	+	-	+	-	+	-
-	+	-	+	-	+	-	+
+	-	+	-	+	-	+	-

우수 프레임(도트 인버전)





8b



9a

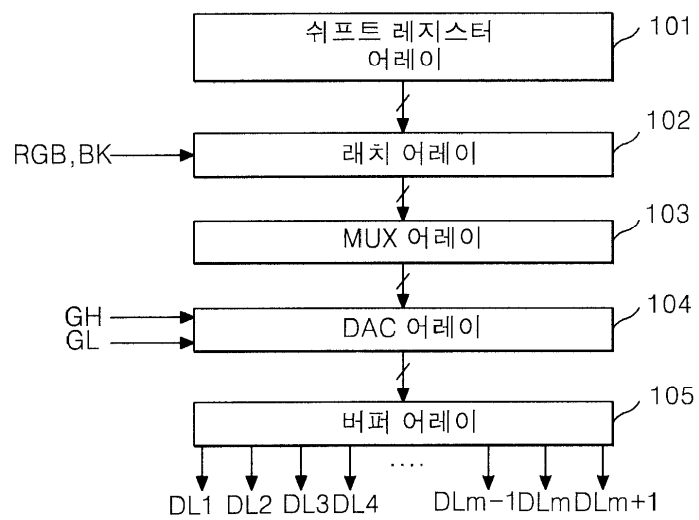


9b

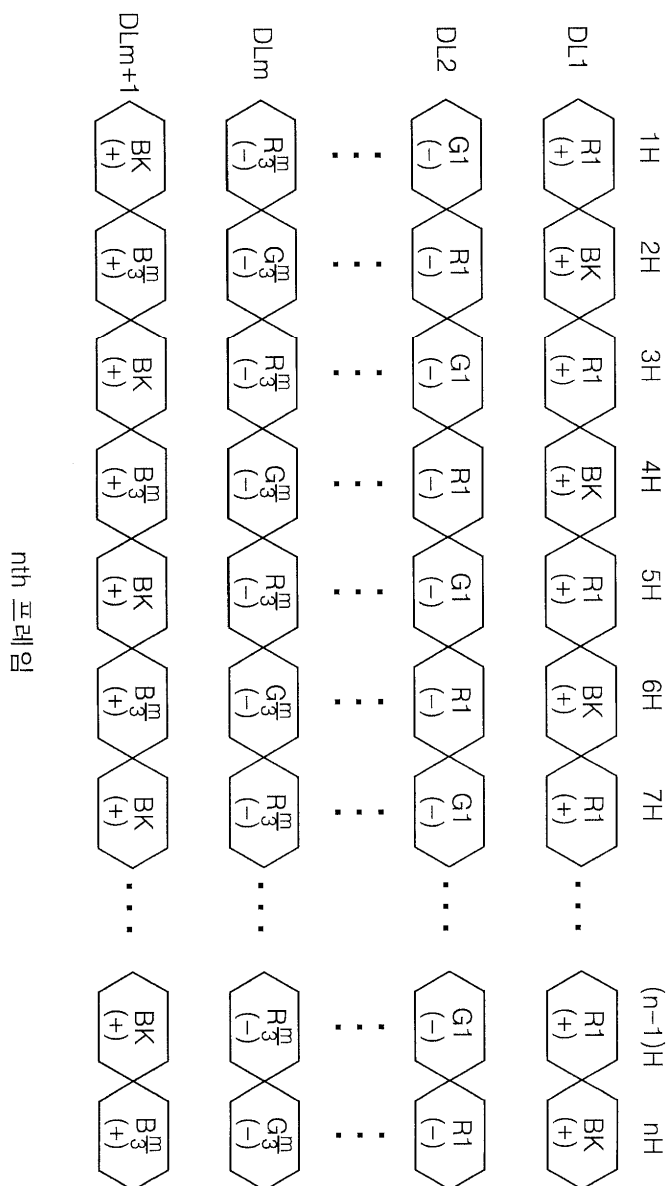


10

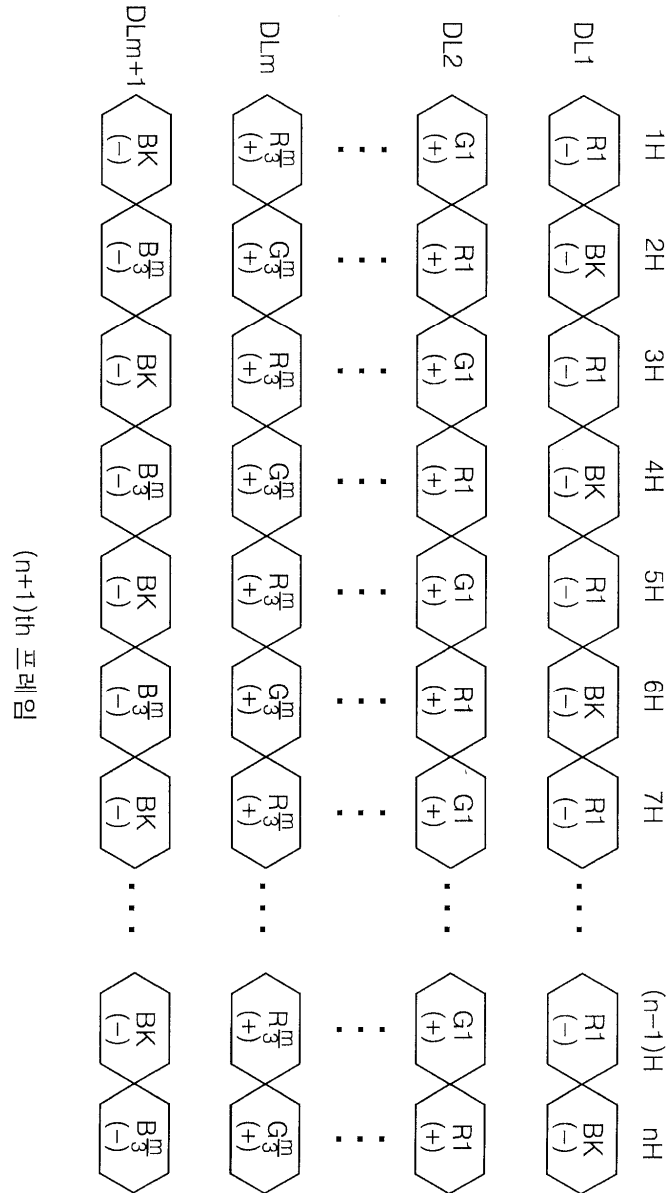
16



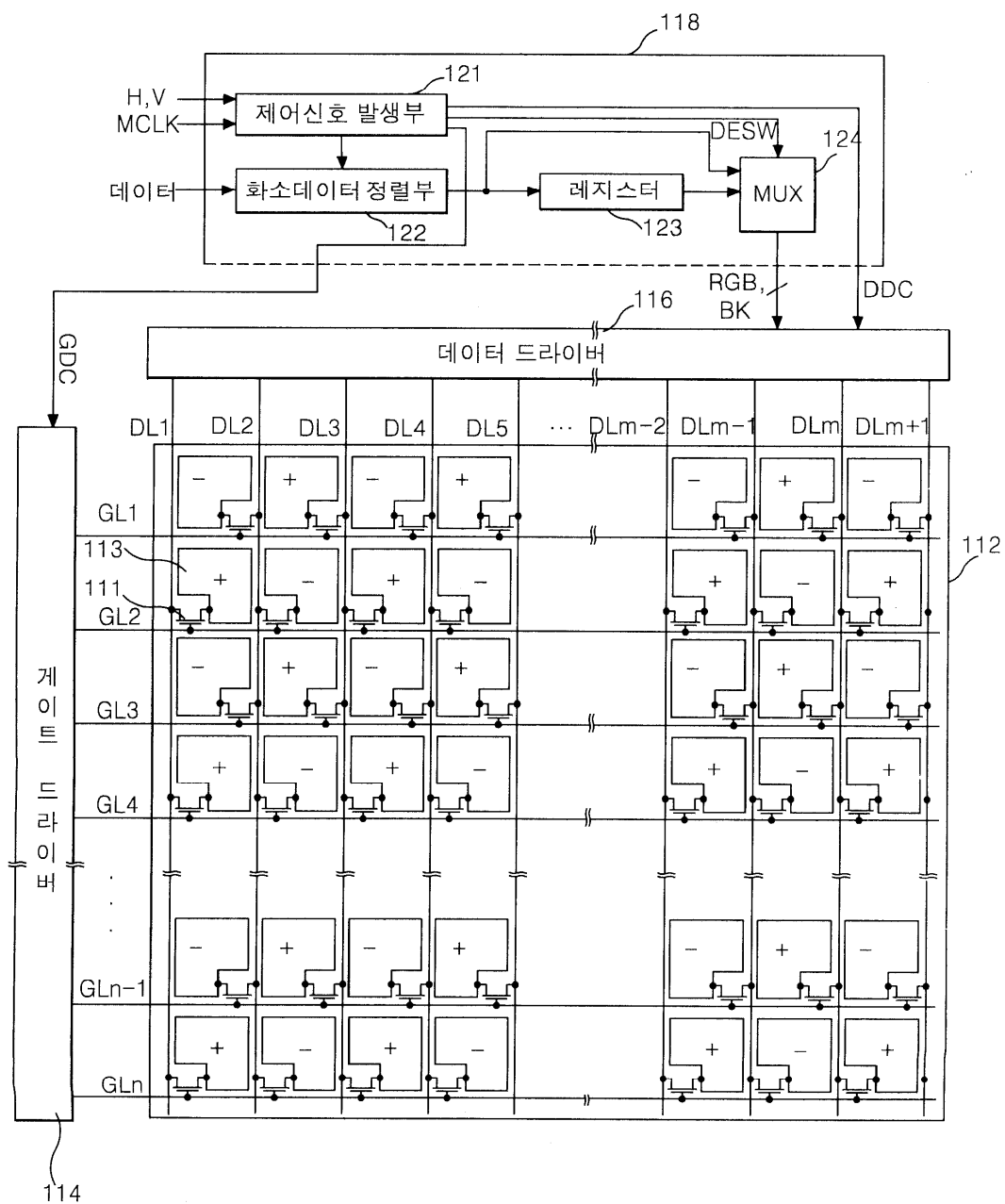
11a



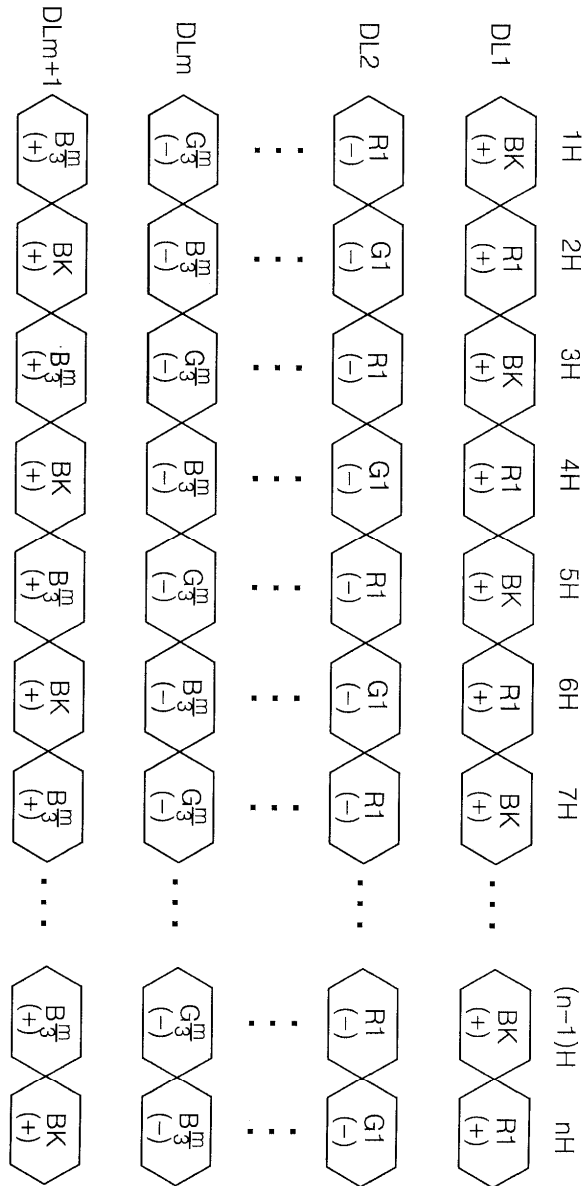
11b



12

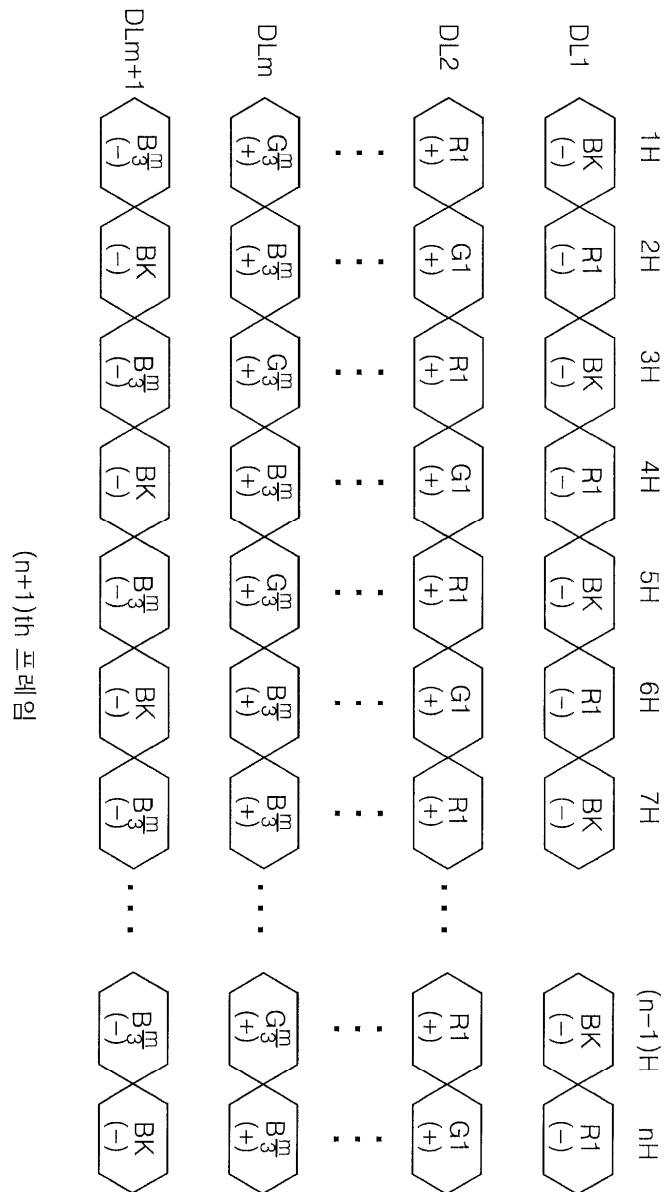


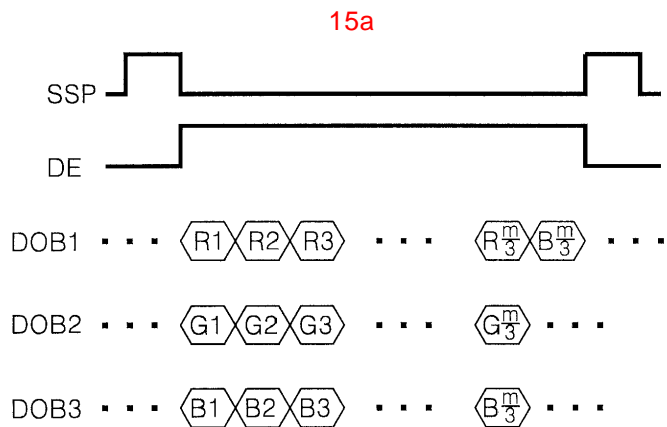
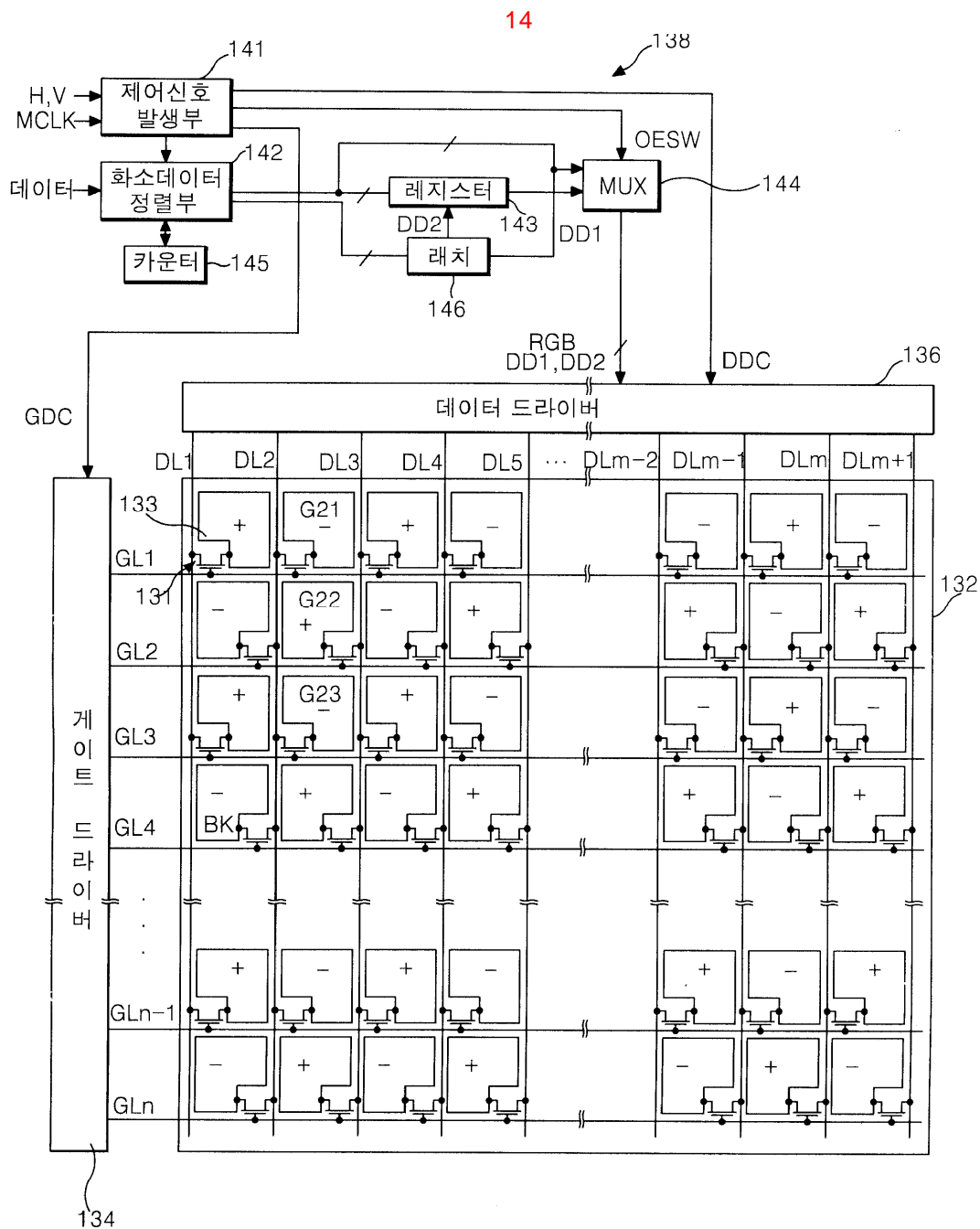
13a



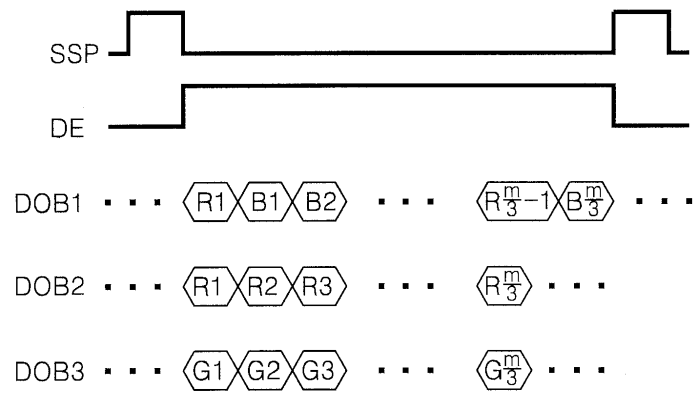
nth 프레임

13b





15b



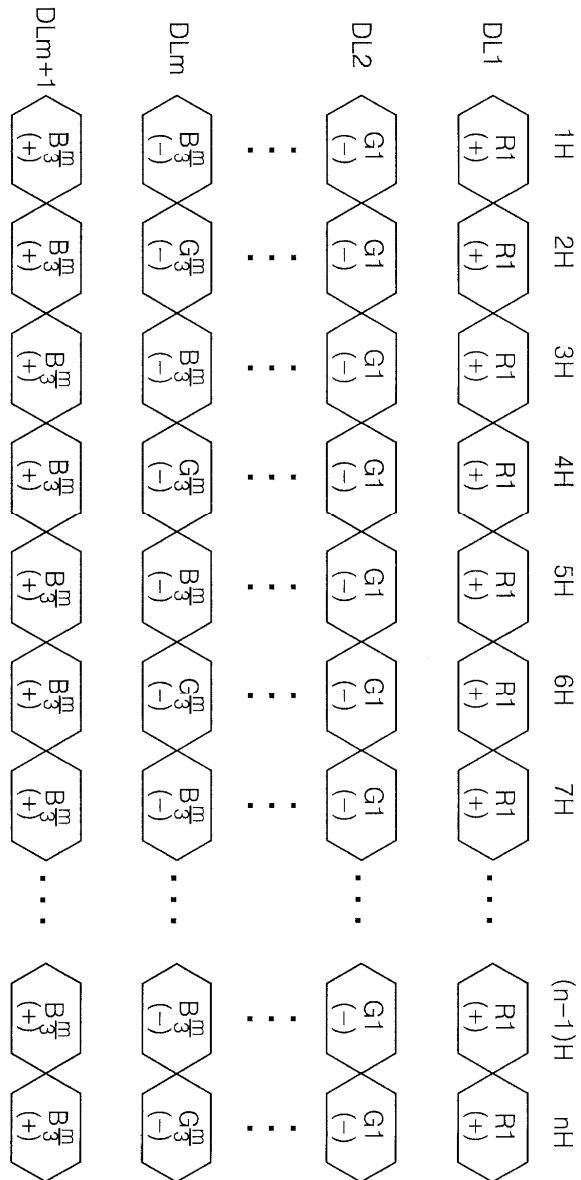
16a



16b

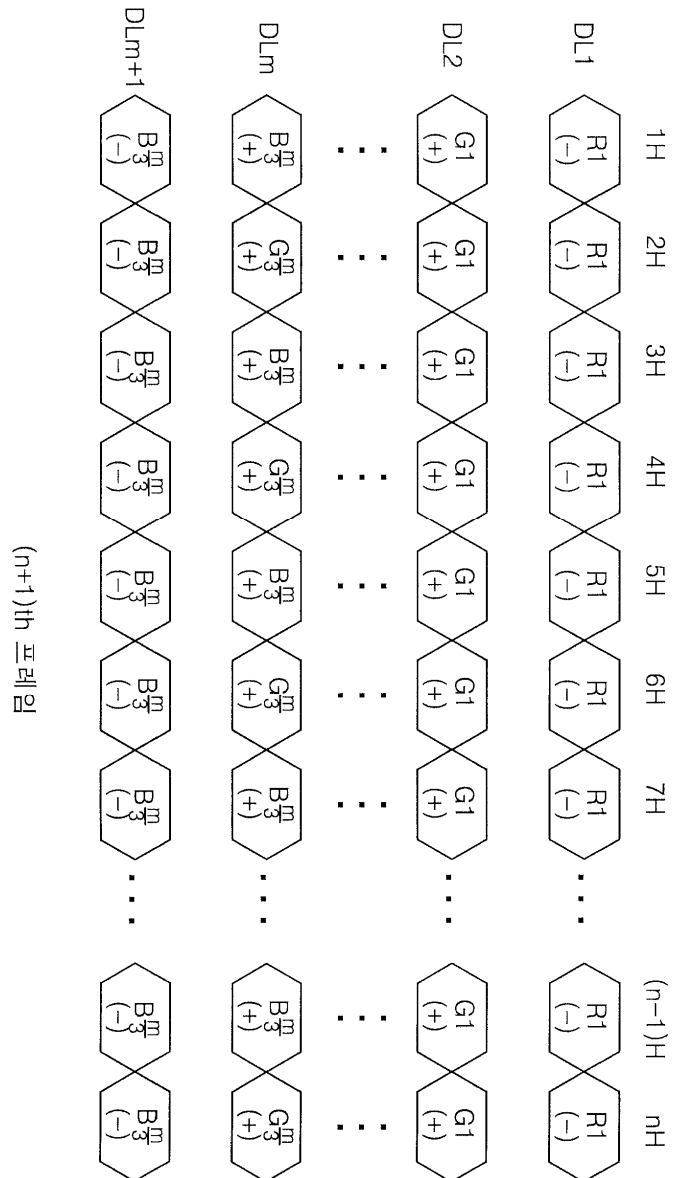


17a

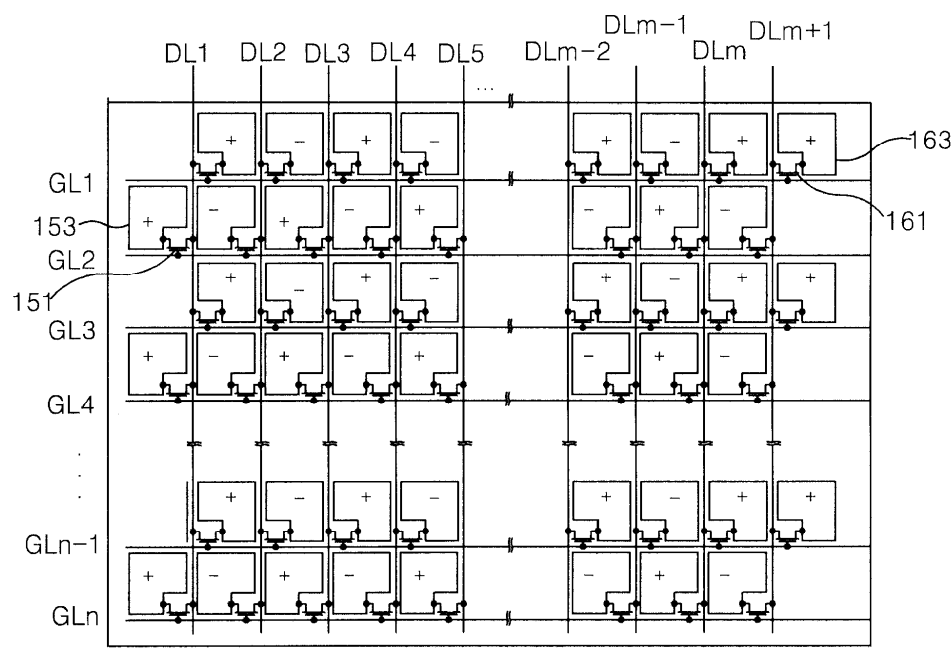


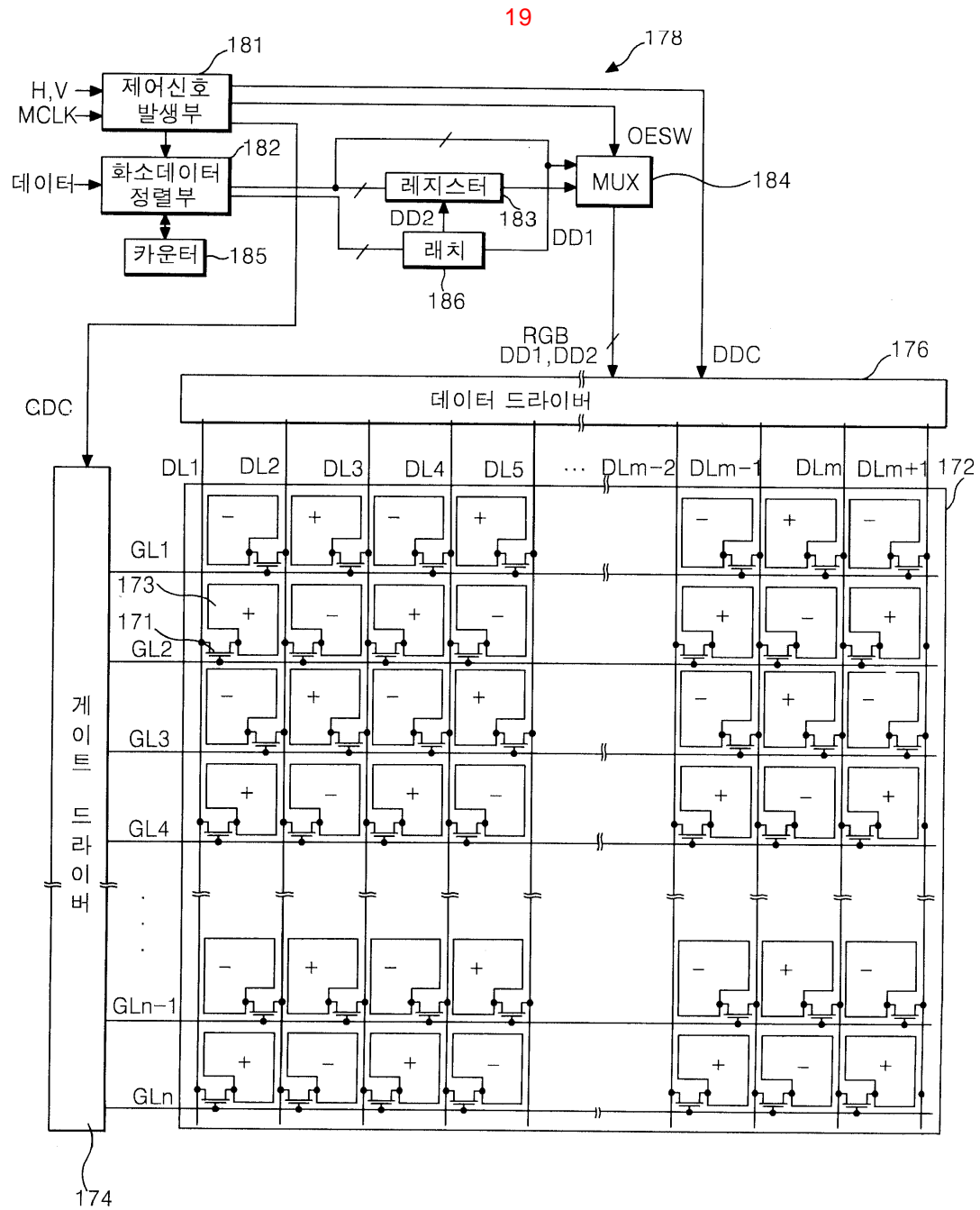
nth 프레임

17b

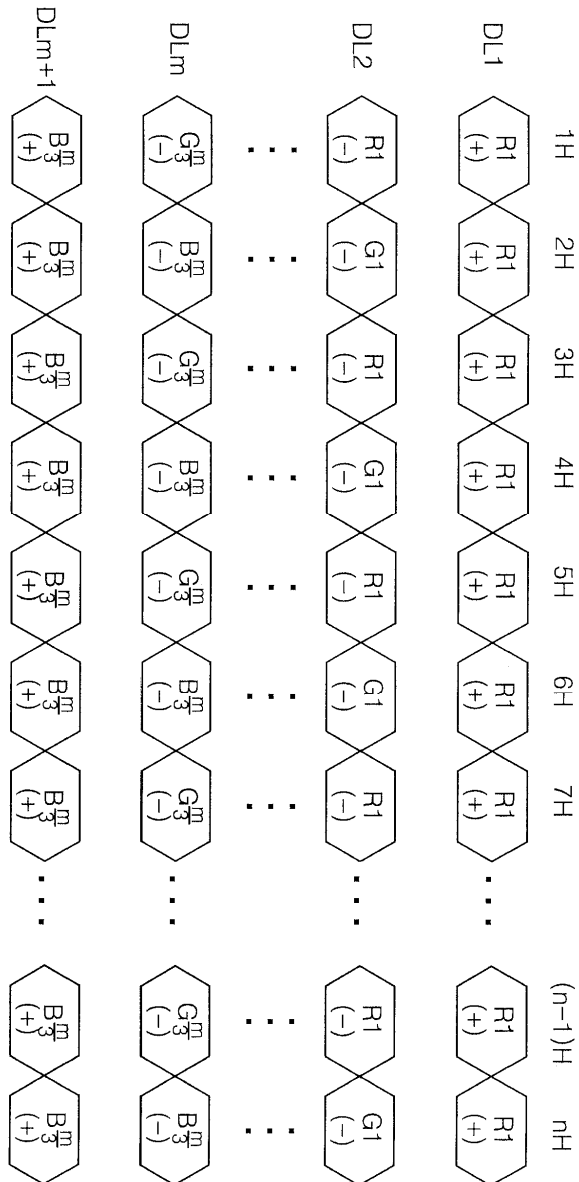


163



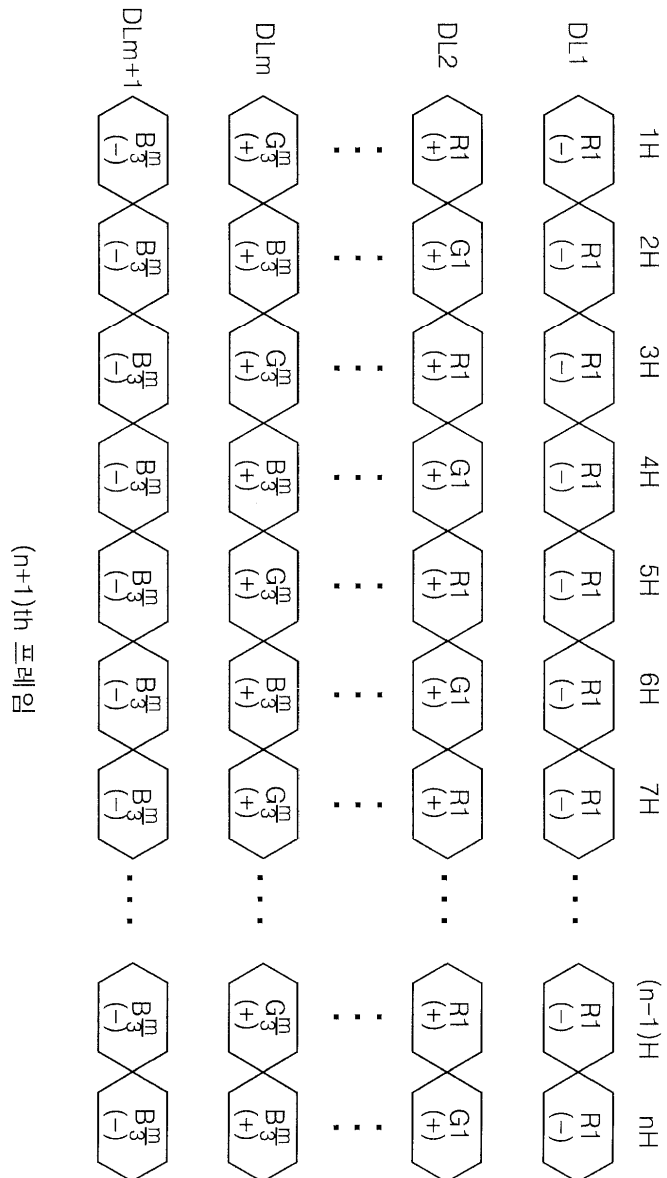


20a

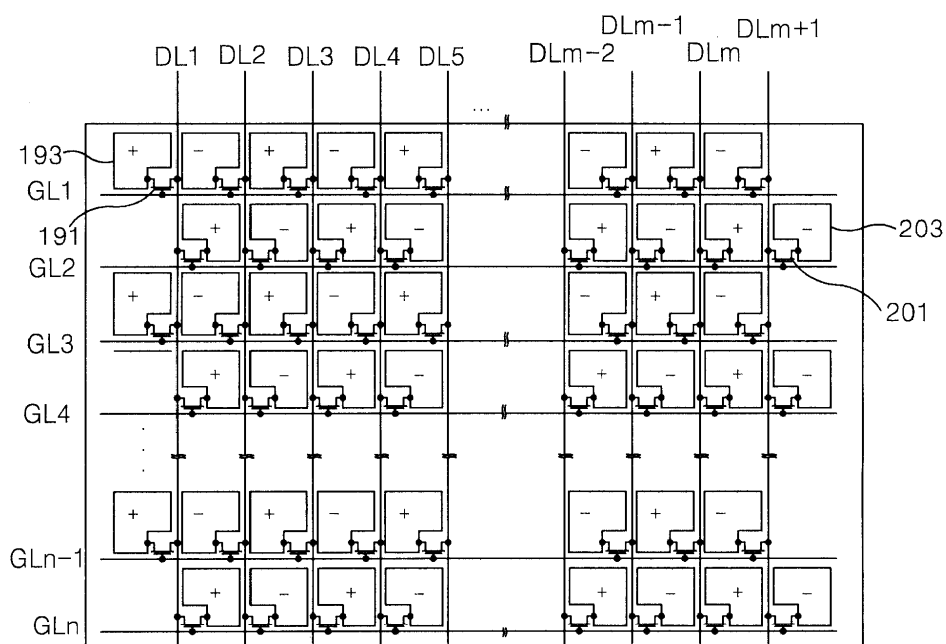


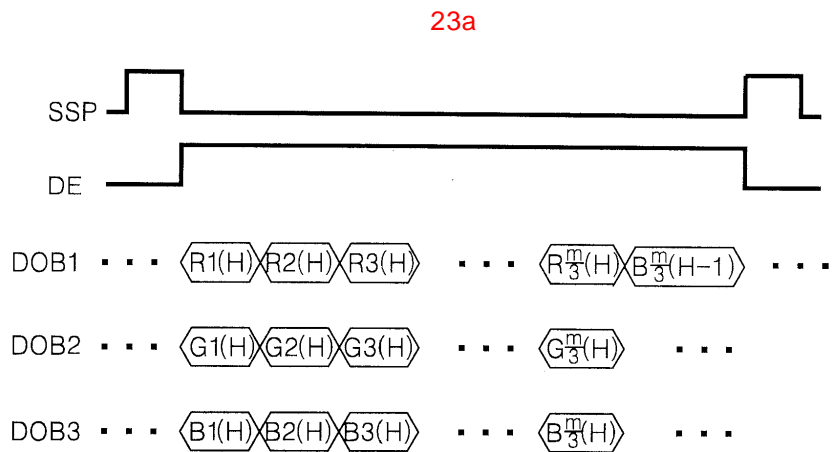
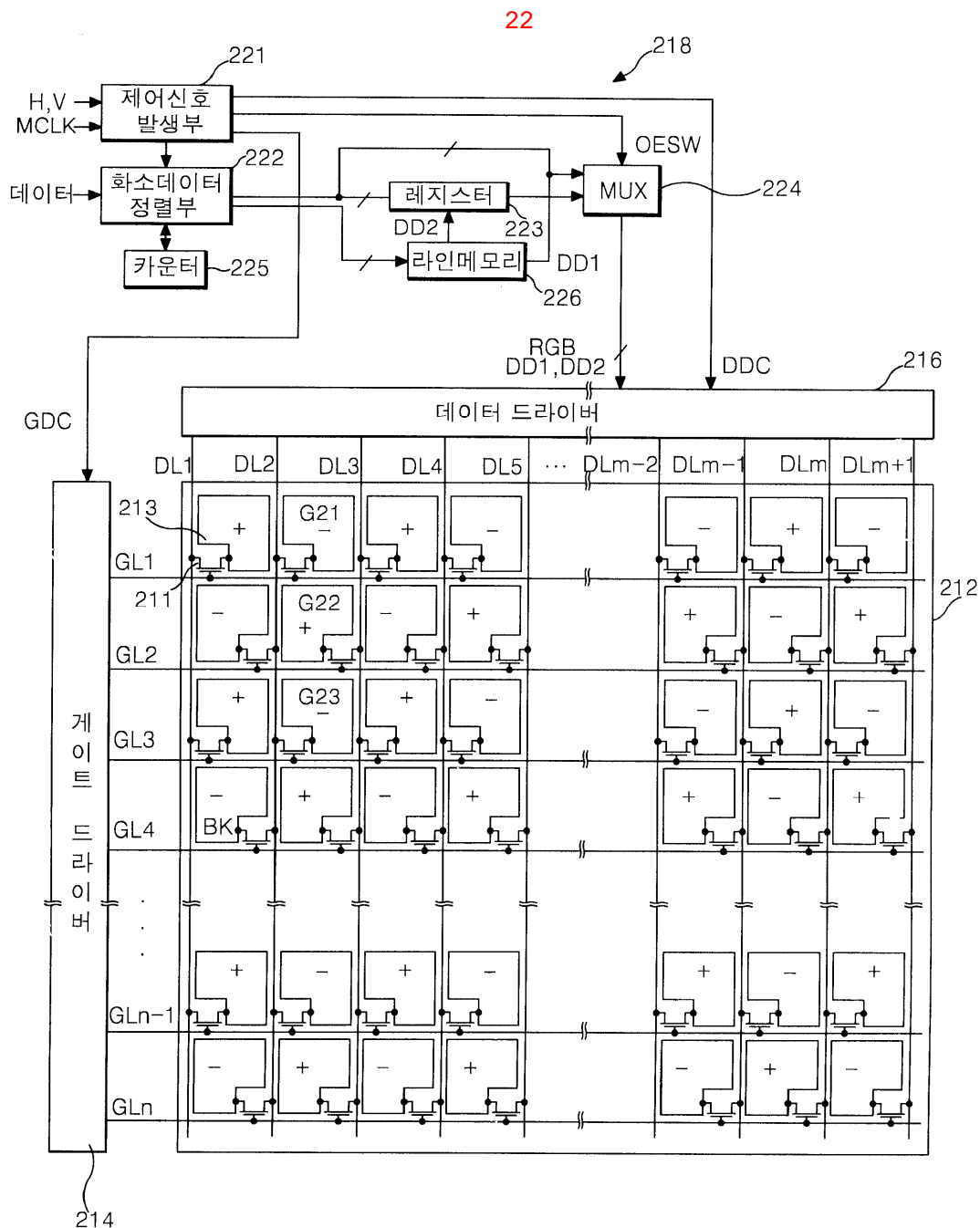
nH 프레임

20b

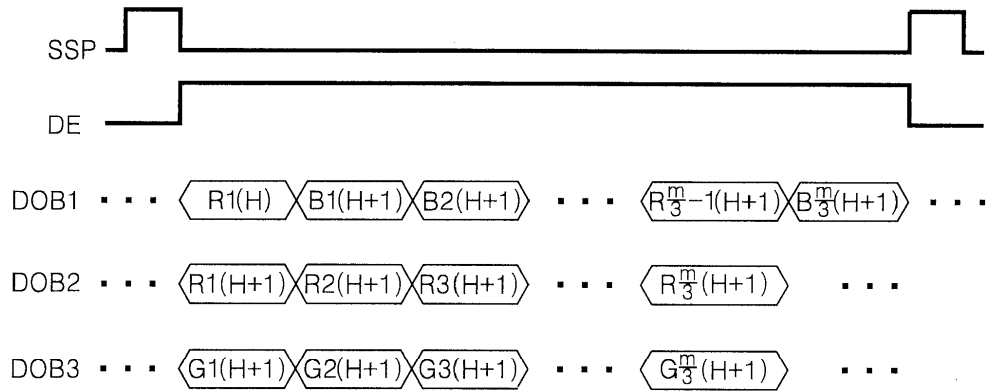


21

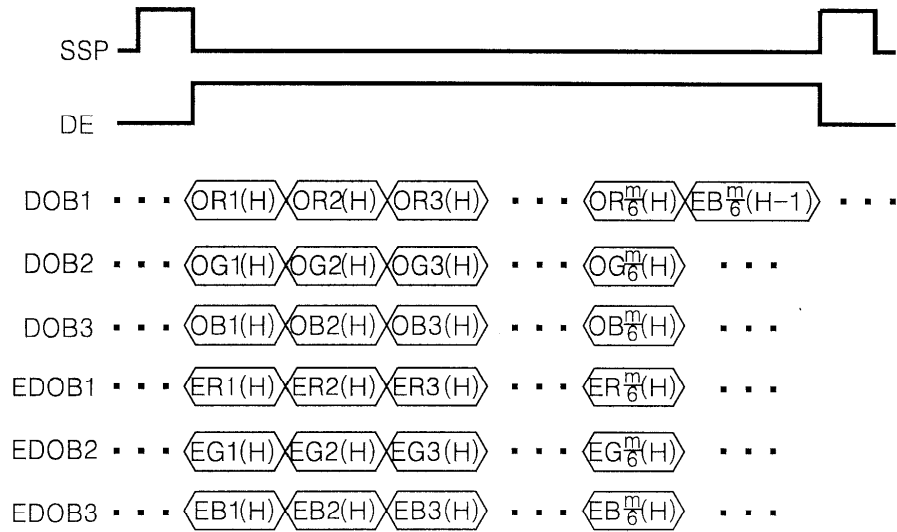




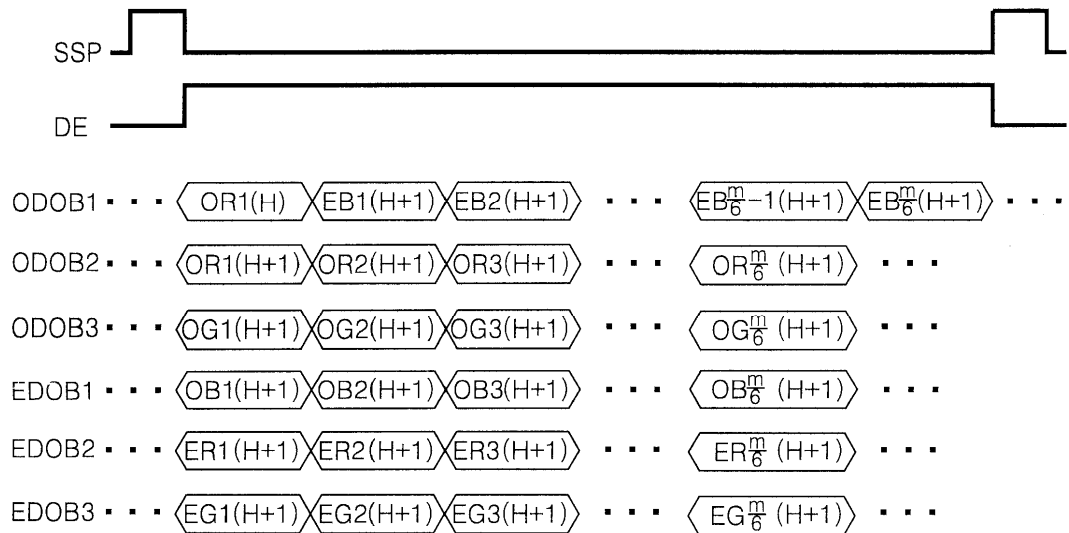
23b



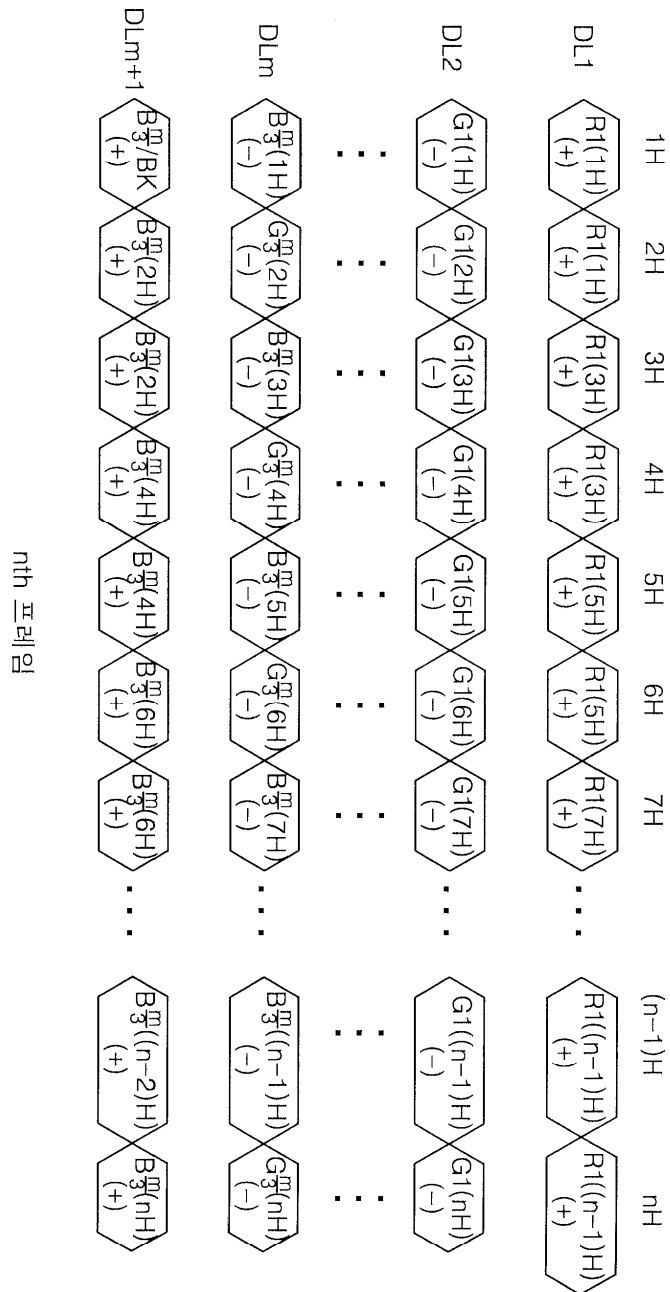
24a



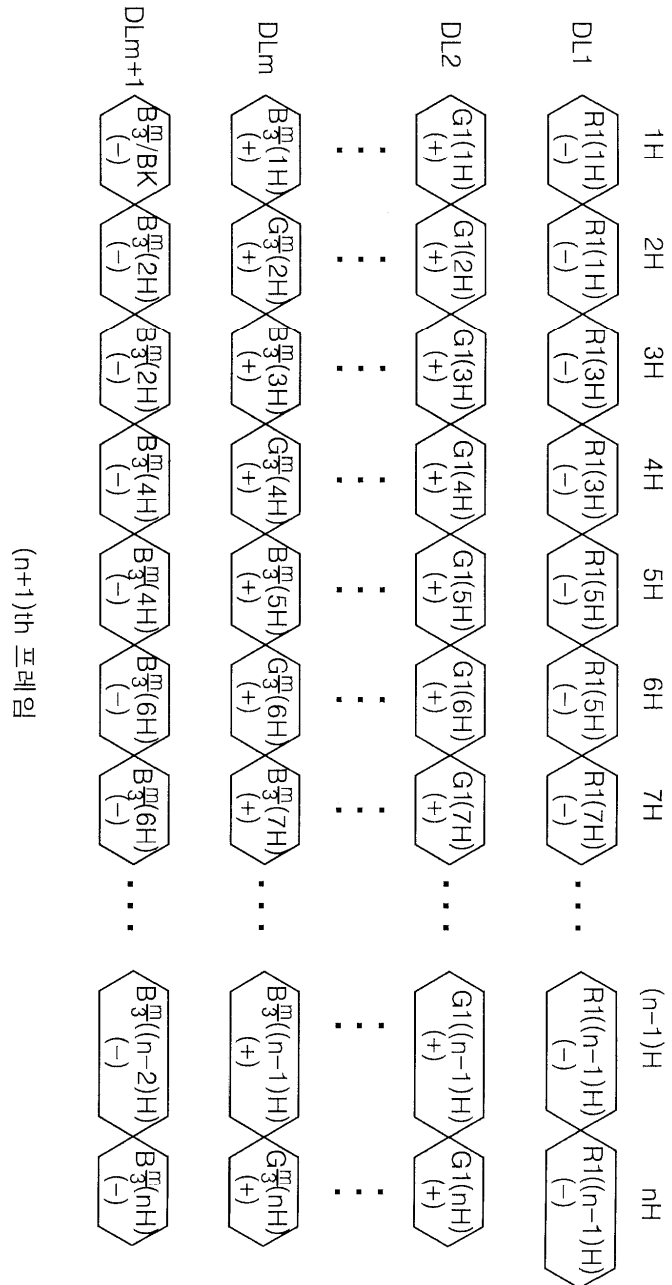
24b



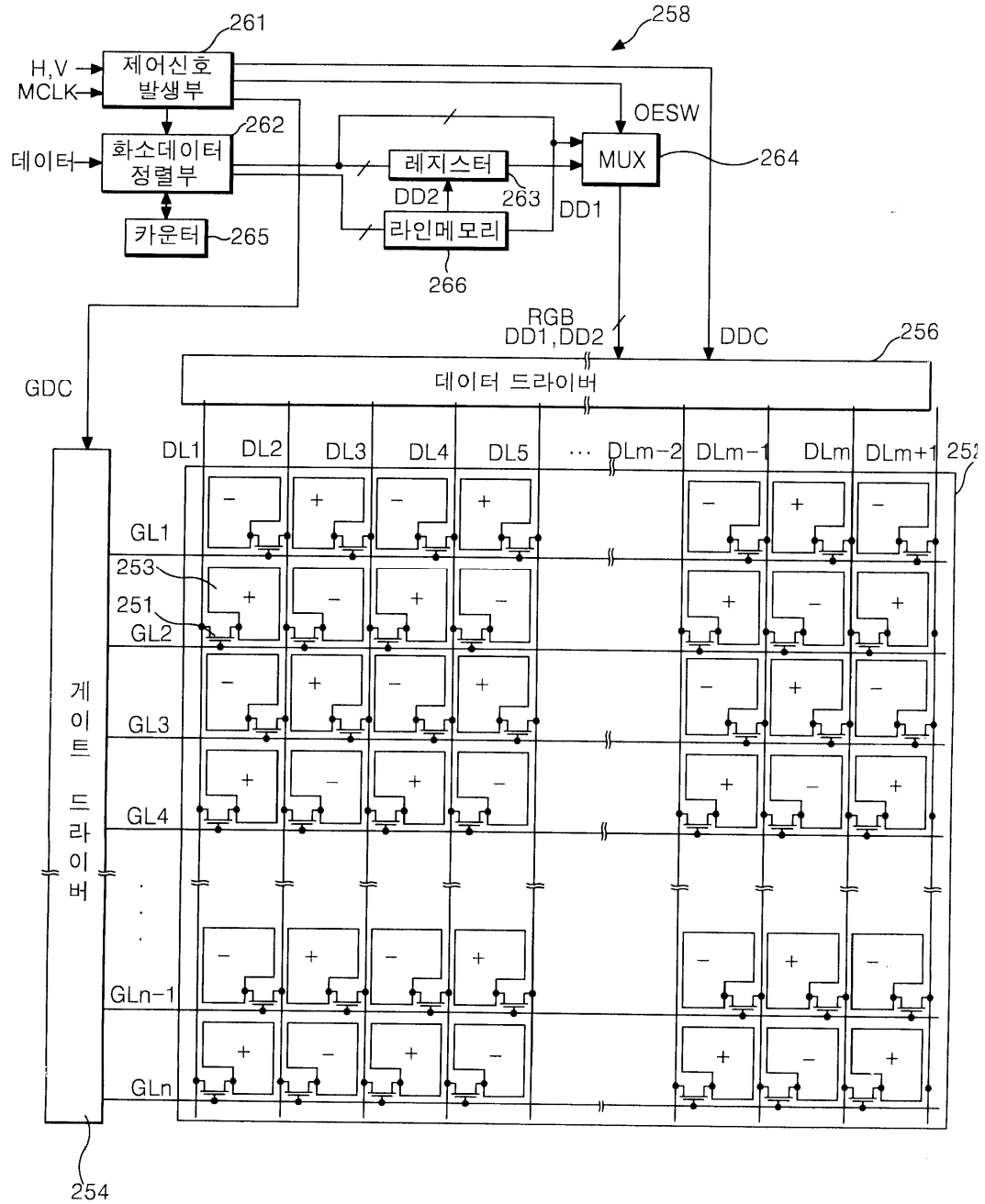
25a



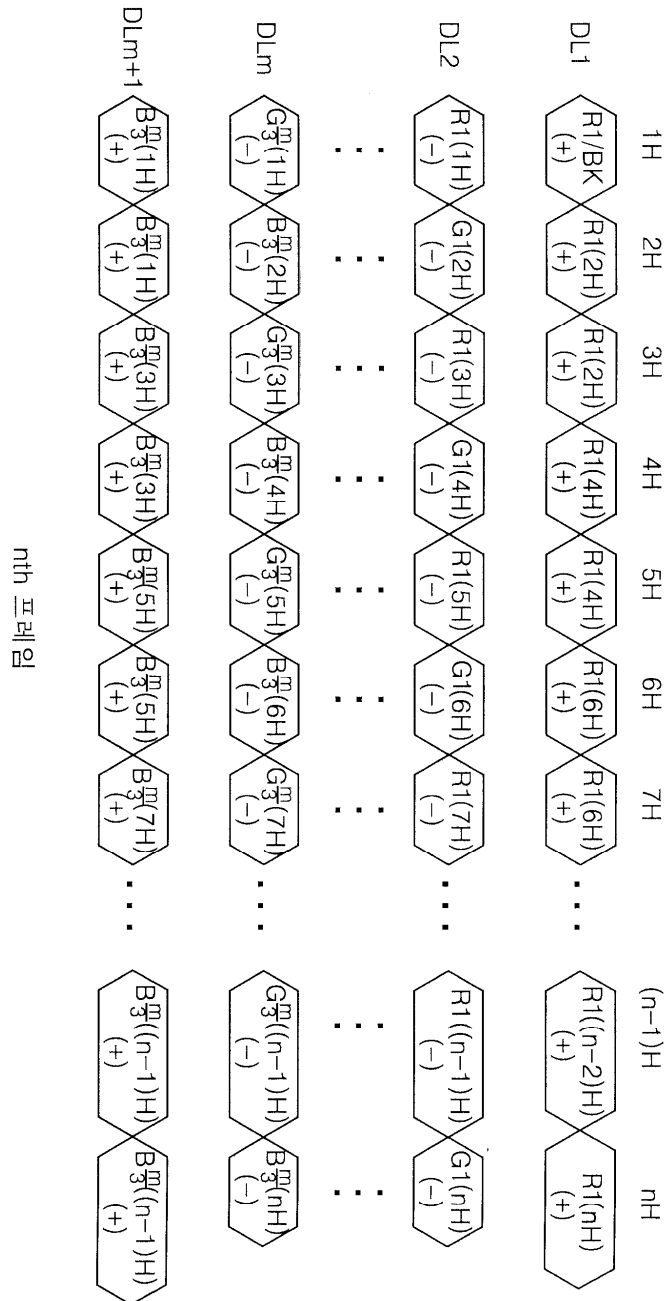
25b



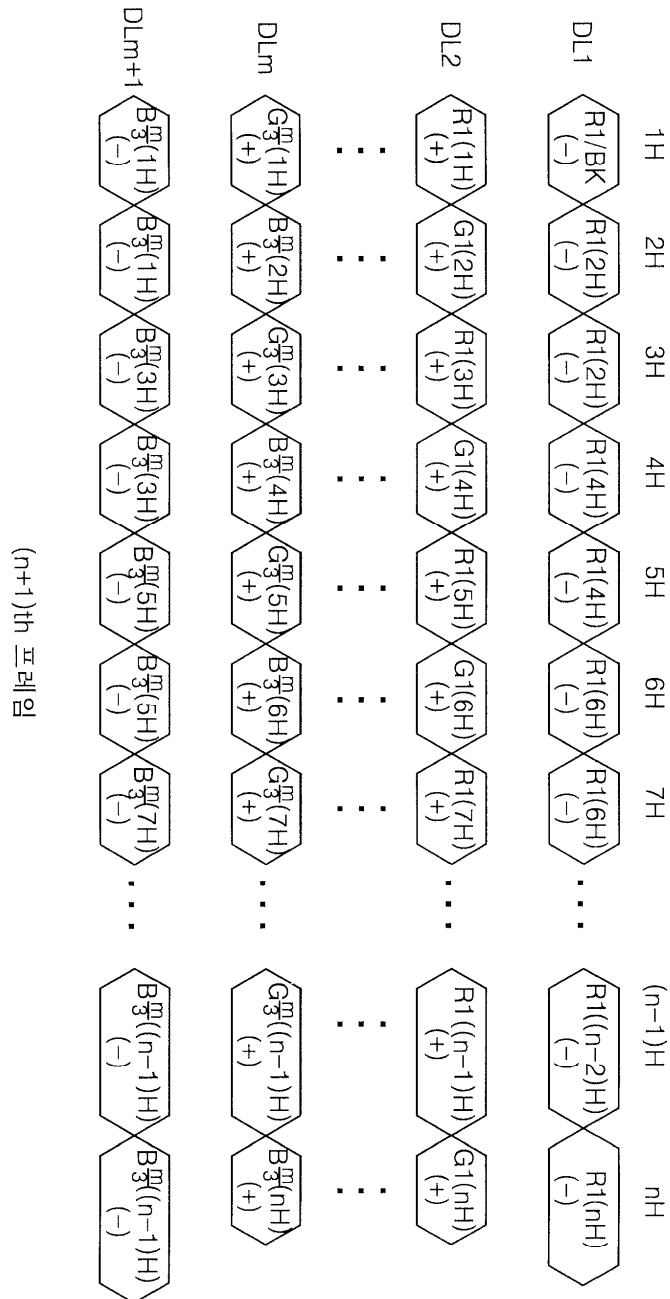
26



27a



27b



专利名称(译)	用于驱动液晶显示器的方法和设备		
公开(公告)号	KR1020030083313A	公开(公告)日	2003-10-30
申请号	KR1020020021795	申请日	2002-04-20
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG显示器有限公司		
当前申请(专利权)人(译)	LG显示器有限公司		
[标]发明人	LEE JAEWOO 이재우 YUN SANGCHANG 윤상창 PARK JUNHO 박준호		
发明人	이재우 윤상창 박준호		
IPC分类号	G09G3/36 G02F1/133		
CPC分类号	G09G2330/021 G09G3/3614 G09G3/3607 G09G3/3688		
代理人(译)	金勇 年轻的小公园		
其他公开文献	KR100853772B1		
外部链接	Espacenet		

摘要(译)

用于驱动液晶显示装置的方法和装置技术领域本发明涉及一种用于驱动液晶显示装置的方法和装置，其改善显示质量并降低功耗。根据本发明的用于驱动液晶显示器的方法和装置通过复制输入数据中的任何一个来产生伪数据，并且薄膜晶体管串联连接在相邻的两条数据线之间，扫描脉冲被提供给布置的液晶面板的栅极线，并且输入数据和伪数据被提供给液晶面板的数据线。6 指数方面 液晶显示装置，反转

