

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl. ⁷
G02F 1/133

(11)
(43)

2002 - 0040613
2002 05 30

(21) 10 - 2001 - 0073056
(22) 2001 11 22

(30) JP - P - 2000 - 0035
5195
JP - P - 2001 - 0029 2000 11 22 (JP)
9647 2001 09 28 (JP)

(71) 가 가
가 가 6 7 35

(72) 가 가 6 7 35 가 가
가 가 6 7 35 가 가
가 가 6 7 35 가 가
가 가 6 7 35 가 가

(74)
:

(54)

() , -) , - () , -) , - 가 .

3

- , - , , ,

1

- .

2

- .

3

EL

4

EL

5

EL

6a, 6b, 6c

EL

-

-

-

7a

7b

EL

(7a)

EL

(7b)

-

8a

8b

9a, 9b, 9c

10

EL

11

EL

12

13

1

14

1

15a

15b

2

16a

16b

3

17

4

18

-

19

*

*

11 : - 14 :

15 : 13 :

14 : 25 :

(flat - panel display)
 EL 10V (hole)
 EL (brightness)
 EL ()
 EL ()
 EL (TFT)가 EL
 TFT EL () 1 1
 EL 가 .2 EL
 EL (low - molecular - weight) EL EL (mult
 i - color) - (full - color)
 (aperture ratio), EL

G(), B() , 3 가 1 , R(),
 , 가 1:1/3 가 EL

3 R, G, B

2 () 1/2:2/3 가

TFT

가

();
 1/2 가 2
 1/2 ()
 가

EL

3 , ,

(i) $X(i+2)$, $(Y(i) \ Y(i+2))$, $(12i \ 12i+2)$, $(13i \ 13i+2)$, $(11) \ i \ i+2 \ 3 \ i \ i+2 \ 3 \ (2X$

$(11) \ i \ i \ - \ (i, i)$, $EL \ (ELii)$, $TFT($

(Cii) , $(13i)$, $(11) \ EL \ (ELii)$, $(TRiia)$, $(TRiib)$, $가 \ EL \ (ELii)$.

$(TRiib) \ EL \ (ELii)$, $(Vo)(14)$.

$(TRiib) \ EL \ (ELii) \ (15)$, $(Cii) \ (13i)$.

$(TRiib) \ (15)$, $(TRiia) \ (12i)$.

$EL \ 4 \ EL \ (21)$, $(25) \ 1 \ (26) \ (22) \ , \ (23) \ , \ (24)$, (27) .

$2 \ (28) \ (27)$.

$EL \ 1 \ (22) \ 2 \ (28) \ (E) \ 가 \ , \ 1 \ (22)$, $(23) \ (24) \ (24)$, $2 \ (24) \ (28)$, $(25) \ (24)$, $가$

$EL \ 가 \ 5 \ . \ 5$

EL

$5 \ , \ (TRiia) \ (TRiib) \ - \ (TFT$

$) \ (31) \ , \ (32) \ , \ (33)$, $(34) \ (34) \ , \ (37) \ 2 \ (34, 36)$, $EL \ (34) \ , \ (38)$.

4, EL (36) 2 (32) (35) 1 () (22) (37) (24) (37) (28) (34) (39) (38) EL

EL - - , 6a, 6b, 6c

EL , RGB - (EL (38) - 6a (32) - 6b - 6c 1 1 - 6a 6c

가 가

EL EL EL EL (37) (35) (36) (37)

EL 가 EL 가 EL 가

EL (7a) R, G, B 3 (7a) (7b) (7b) 가 (7a) (7a) (7b) (7a)

8a (7a) 8b (7b) 가

(oblique component) (8a) (eclipse)가 EL

(8b)

가 , 가 (stiffness)

(7a) EL (8b) EL 가 가 9a

10 (RGB) 3 3 가 가 1/2 가 PC()

11 (RGB) 2 EL 가 EL EL 가 가 (RGB) 10

EL 가 EL EL 가 EL 12 (39) (32) (39) (38) EL

12 , (-) , (39) (39) (W) .
가 . () - , 가 .
()

(32) (39) - (38) EL (39)

[1]

1 (39) , 13 2 (39) (39) , 2
6c (39) 6c
, R - G - (39) () 2
(39) (39) B - B - R

1 EL -
2 (39) (39) , 2 -
(39) 가 (39) 가 .

[1]

1 , 2
14 (39) 14 ,
(39) (39) 2 - 2 -
, 가 (39) (,)
, 13 (39)
(39)

(39) (39) 13) ,
, 13 가 가 .
(39) - TFT

[2]

15a (39) , 2 (F, F') (39) TFT (32) (39) (F, F') (39) F' . F F' F F' (39) , F' .

2 (39) , 2 (39) TFT (39) 가 가 가 , 가 .

[2]

15b () 가 , TFT (39) , 2 (39) 2 (39) 가 가 가 , 가 , 가 .

[3]

3 가 , TFT (39) 가 () 16a (39) 가 , 2 (39) , 2 (39) 가 가 가 , 가 16b

[4]

17 4 . 17 - 가 18

i i+1 2 - ((i, i) (i, i+1)) - (P1, P2)

18 (41-1); EL (41-1) (P1) 1 () EL
 TFT(42-1); TFT(42-1) (Vdd) 2 ((Vdd))
 (48B-1) TFT(44-1) (43-1); TFT(42-1)

가 , - (i, i+1) - (P2) EL (41-2);
 EL (41-2) (Vdd) (Vdd) (43-2); TFT(42-2) TFT(42-2); TFT(42-2)
 (48B-2)
 TFT(44-2)

2 - (P1, P2) , 가
 - TFT(45); TFT(45) (47) TFT(46) , TFT(45)
 - (P1) TFT(44-1) - (P2) TFT(44-2)
 , TFT(45) (Vdd) . TFT(46) TFT(45) ,
 (47) , (48A)

, p- MOS 가 TFT(42-1), TFT(42-2), TFT(45) , n- MOS
 TFT(44-1), TFT(44-2), TFT(46) , TFT

47) TFT(45) - (P1, P2) TFT(46) (47) (lw)
 (lw) 1 . TFT(45) TFT(46) ((lw) 가 , TFT(42-1, 42-2)
 - (P1 P2) . (lw) TFT(45)가 , TFT(45)

TFT (44-1, 44-2) TFT(45) (lw) (43-1, 43-2)
 2 (43-1, 43-2) TFT(45)
 (lw) TFT (44-1, 44-2)
 TFT (42-1, 42-2) (43-1, 43-2) EL
 (41-1, 41-2) EL (41-1, 41-2)

48B - 1) - (i, i) (lw) (48A,
 가 (47) (lw) TFT(48) TFT(45)
 . TFT(45) , (lw) TFT(45)
 TFT(44 - 1) (43 - 1) , (43 - 1)

, (43 - 1) 가 TFT(42 - 1) EL (41 - 1)
 , EL (41 - 1) (48A, 48B - 1)
 (i, i) , (48B - 2)
 - (i, i+1) EL (41 - 2) (43 - 2)
 , - (i, i) EL (41 - 2)

(48A, 48B - 2) - (i, i+1) (lw) (lw)
 가 (47) . TFT(46) TFT(45) TFT(44 - 2)
 , (lw) 가 TFT(45)
 (43 - 2) , (43 - 2)
 , (43 - 2) 가 TFT(42 - 2) EL (41 - 2)
 EL (41 - 2) , (48B - 1)
 - (i, i) EL (41 - 1) (43 - 1)
 , - (i, i+1) EL (41 - 1)

17

, () 2 - ((i, i) (i+1, i)) -
 , 2 - , TFT -
 EL -
 (39) , 2 - (39) ,
 1 3 , 2 -

17 18 - (i, i) -
 (P1) , T1 TFT(45) , T2 TFT(42 - 1) , T3 TFT(46)
 , T4 TFT(44 - 1) , Cs() (43 - 1)

17 () 2 - ((i, i) (i+
 1, i)) - 2 -
 (39) , (Ly) , ()
 2 - ((i, i) (i, i+1)) - , 2
 - (39) , (Lx)

d) (51) $2 - (i+1, i+1)$, , 17 , $2 - (i, i) - (i+1, i)$, (Vd
 $i, i+1)$ - $(i+1, i+1)$ (Ly) 가 (51) 가
 $2 -$, 17 (51) .

, , 17 $2 - (i, i) - (i, i+1) - (i+1, i) - (i+1, i+1)$, X1(i, i+1) (52) $2 -$
 $(i+2, i) - (i+2, i+1)$ (Lx) 가 (52)
 $2 -$, 19 - TFT(46), , 17
 (T3)가 2 - .

1)(18 TFT(45)) (51) (53, 54) (T
 (B) (A) (T2)(18 TFT(42-1)) (T
 . (53 54) 19 , (A) (53) (T1)

(T1) , () 가 , (51) , ()
 ,) 가 (T1) , (A) (53)
 , 가 , (53 54) (51) ,
 , 가 가

, $2 -$ (39) , $2 -$
 가 , EL (39) 가 , ,
 - 가 EL
 - EL EL

, -
 , -
 - -
 , , 가 .

(57)

1.

- , -
 - :
 - ;
 - - 1/2 가 , 2
 - 1/2 - ,

2.

1 ,
 3 3 ;
 , - 3 3
 - , ;
 - , 2 - , ,

3.

1 ,
 2 - , 2 -
 , .

4.

1 ,
 ,

5.

3 ,
 ,

6.

3 ,

- 2 - ,

7.

1 ,

- 2 - .

8.

6 ,

- 2 - .

9.

7 ,

- 2 - , 2 - 가 ,

10.

1 ,

- 2 , 2 - .

11.

6 ,

- 2 , 2 - .

12.

10 ,

- 2 - 가 ,

13.

1 ,

- , , ,

14.

1 ,
1 , 2 ,
,

15.

1 ,
- , .

16.

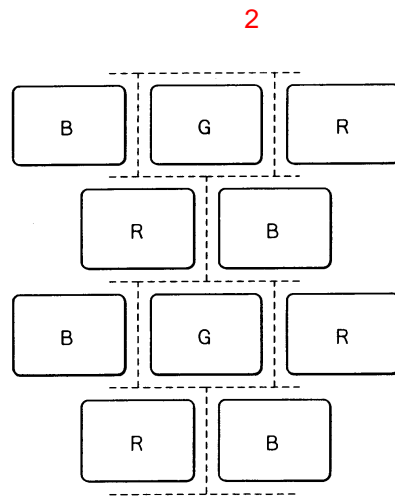
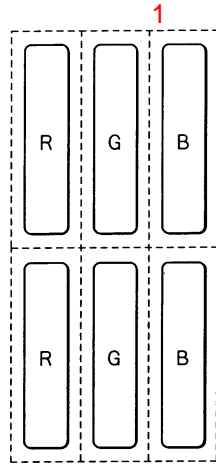
- ,
- , , ,

17.

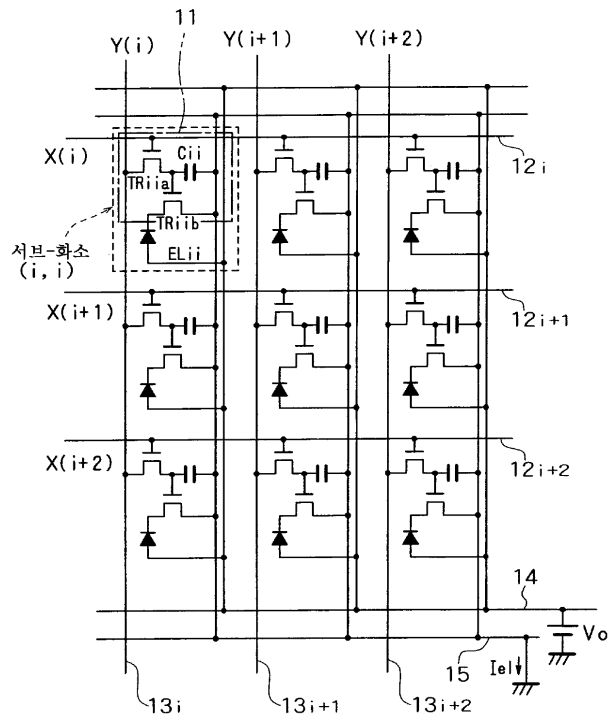
16 ,
1 , 2 ,
,

18.

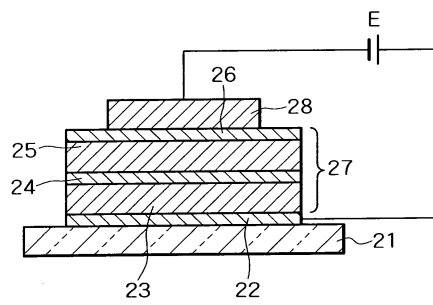
16 ,
- , .



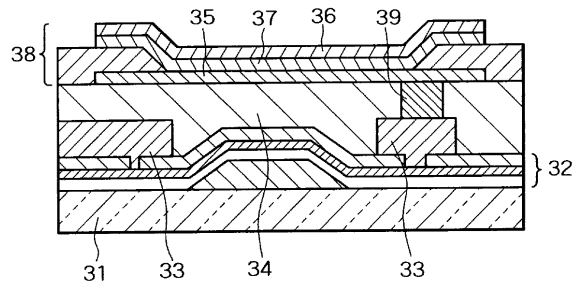
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4



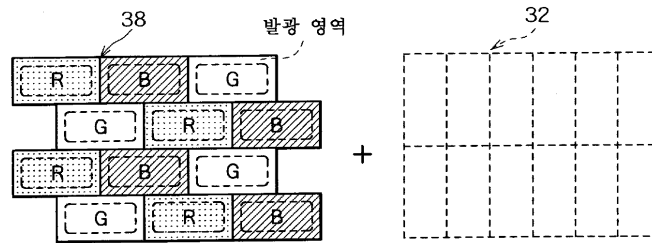
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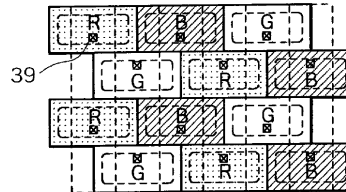
6

(a)

(b)

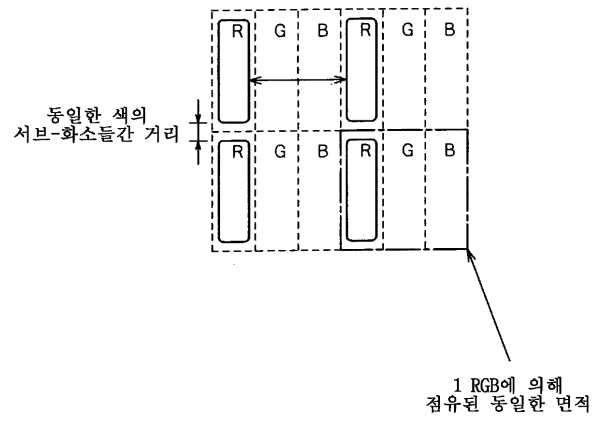


(c)

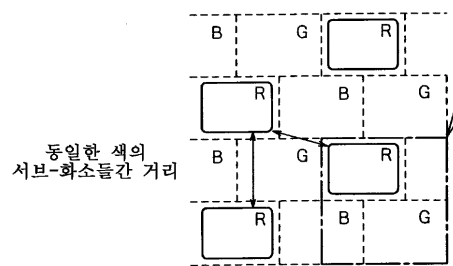


7

(a)



(b)



8a

길고 좁은 마스크

위에서 본것



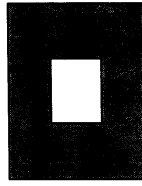
옆에서 본것



중좌의 사행 성분
대해 약화
(큰 억제)

8b

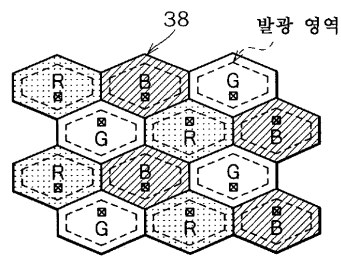
거의 정사각형의
마스크



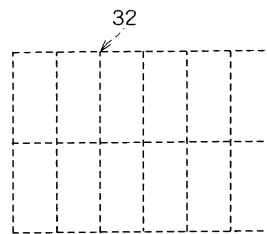
증착의 사행 성분에
대해 강합
(작은 임피)

9

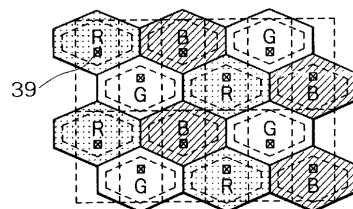
(a)



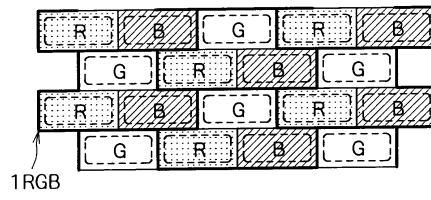
(b)



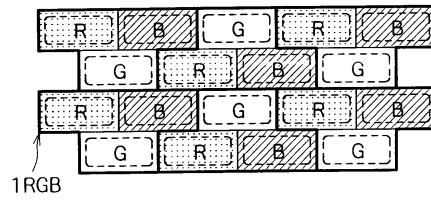
(c)



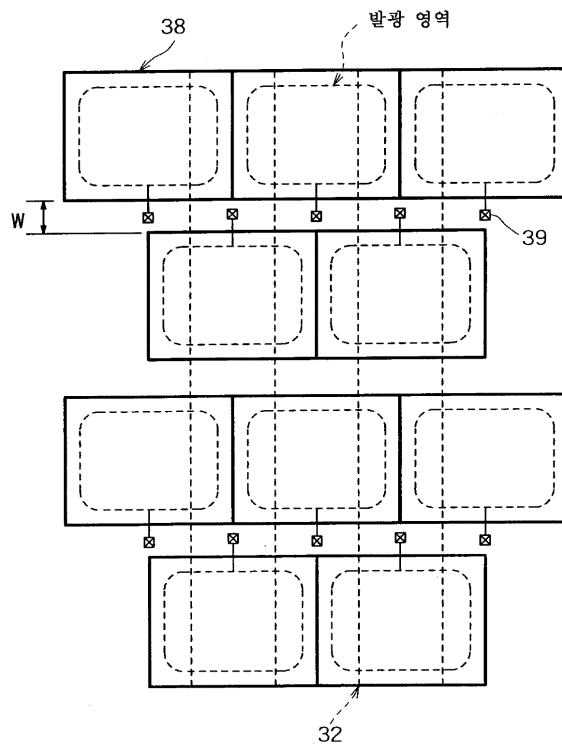
10



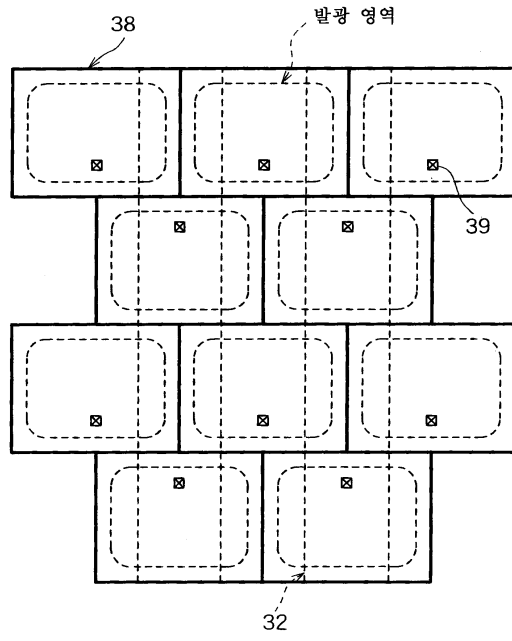
11



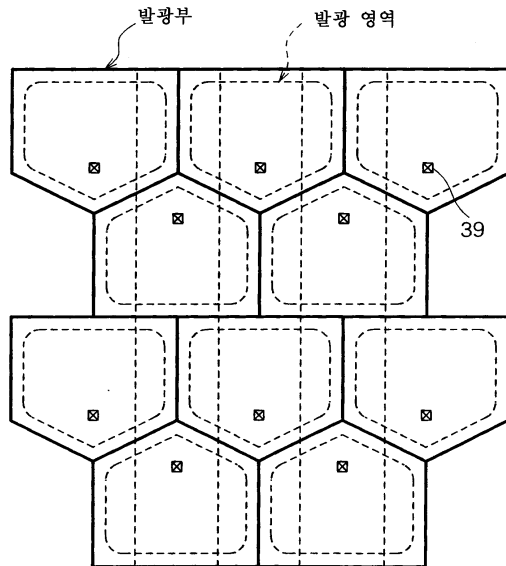
12



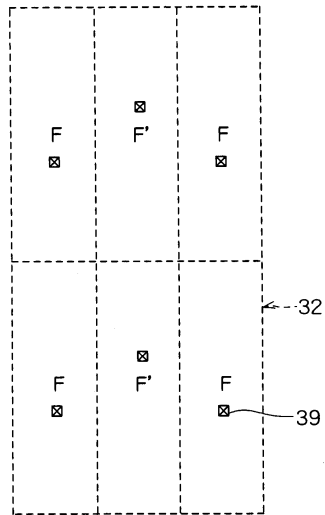
13



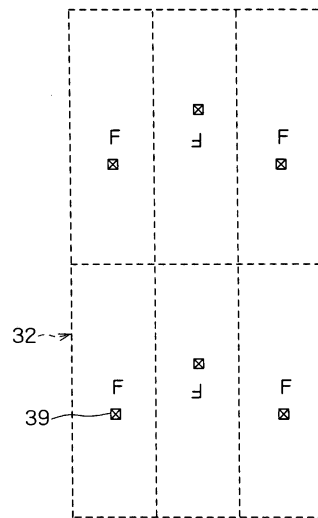
14



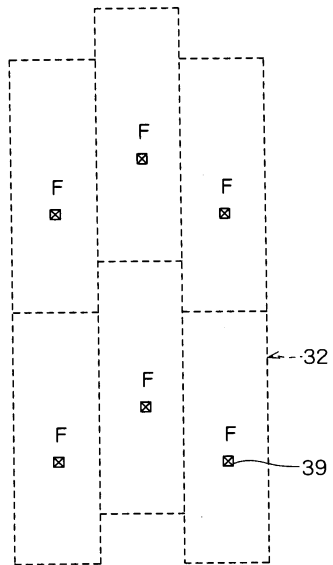
15a



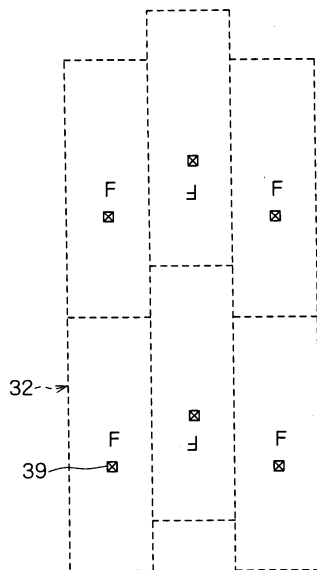
15b

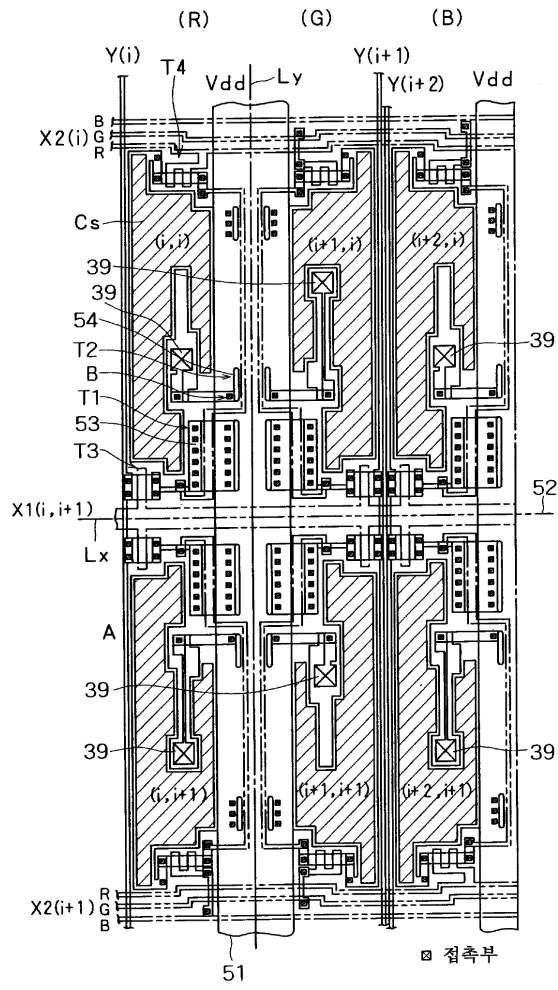


16a

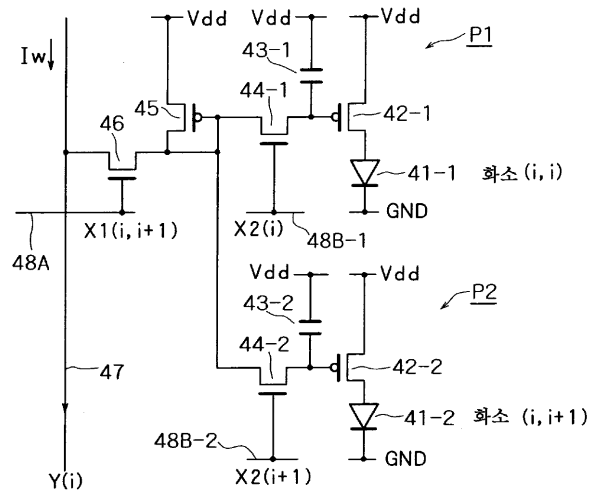


16b





18



19

