

(19)  
(12)

(KR)  
(A)

(51) 。 Int. Cl. <sup>7</sup>  
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(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)  
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(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

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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



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

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

2.

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

3.

1 ,  
 2 - , 2 -  
 , .

4.

1 ,  
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5.

3 ,  
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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.

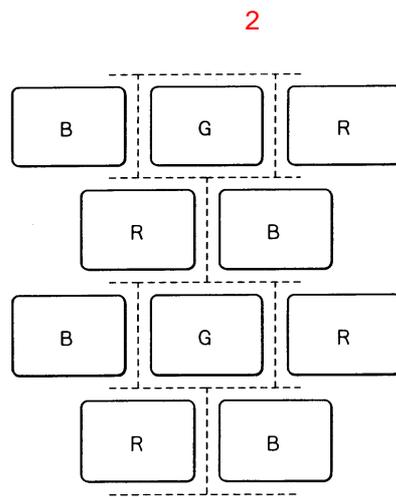
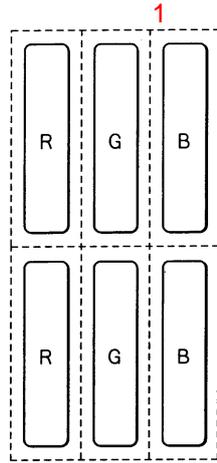
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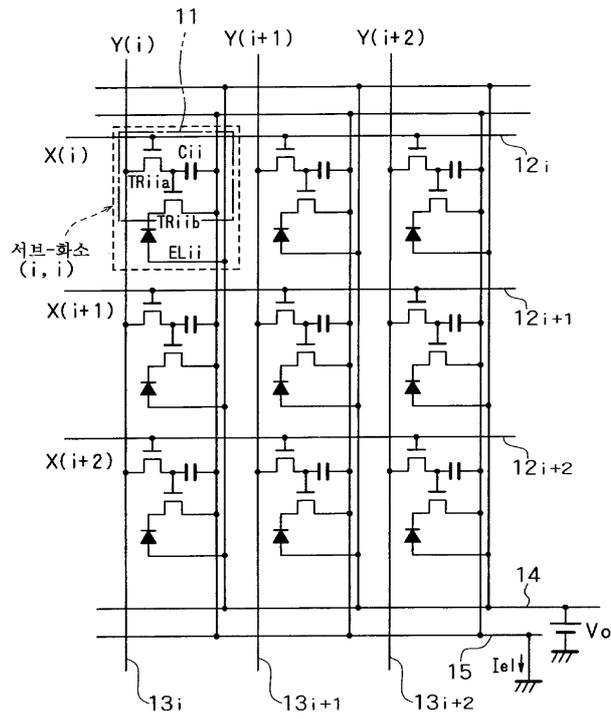
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1 , 2 ,  
,

18.

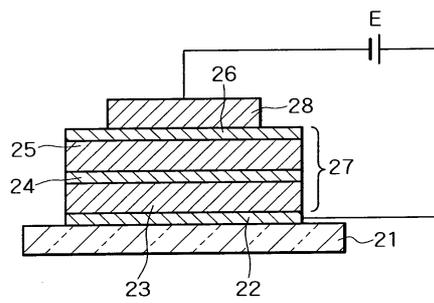
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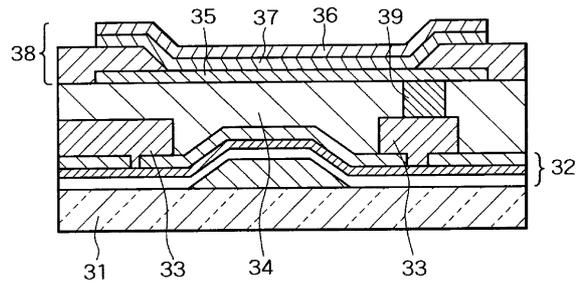
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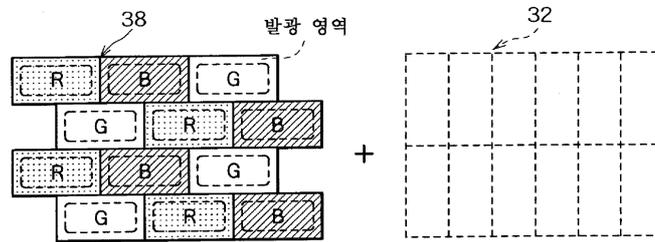
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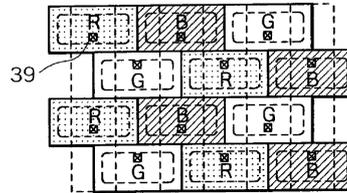
6

(a)

(b)

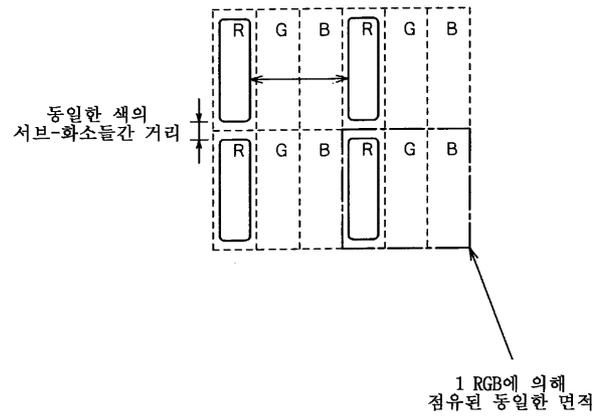


(c)

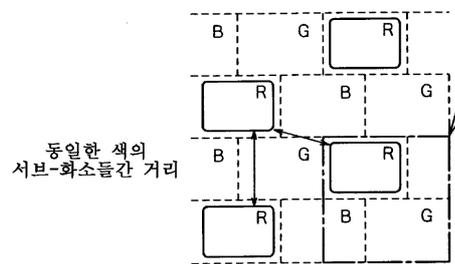


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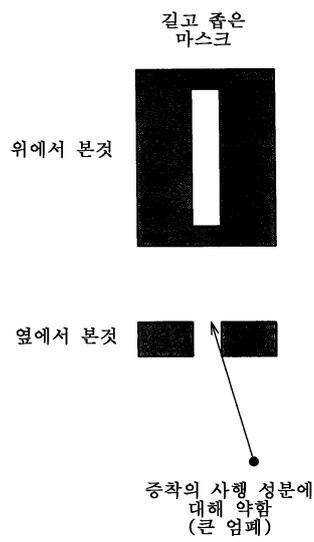
(a)



(b)

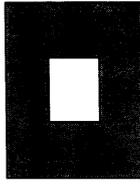


8a



8b

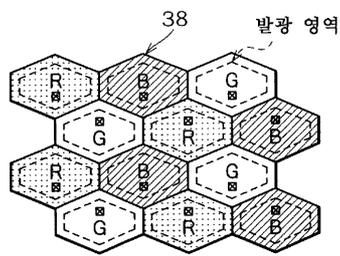
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마스크



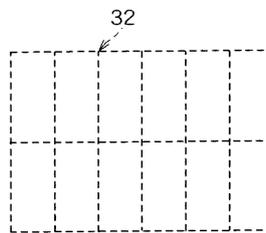
증착의 사행 성분에  
대해 강합  
(작은 임피)

9

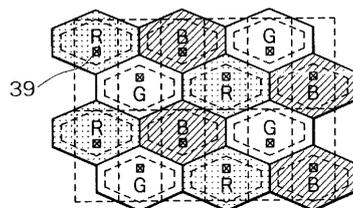
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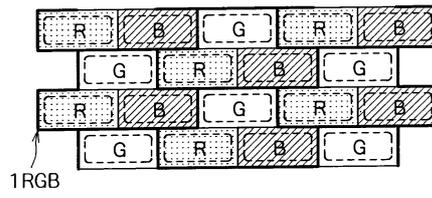
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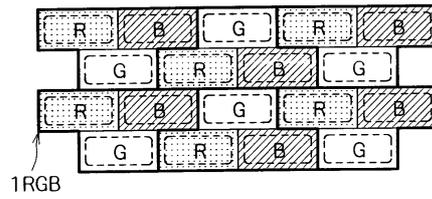
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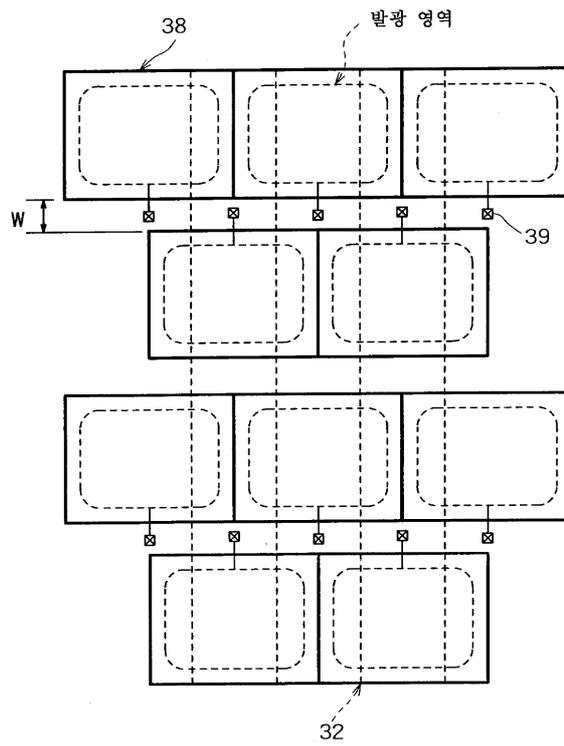
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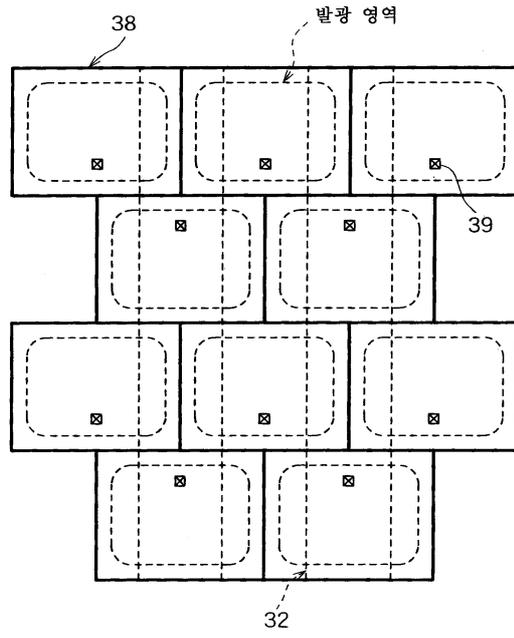
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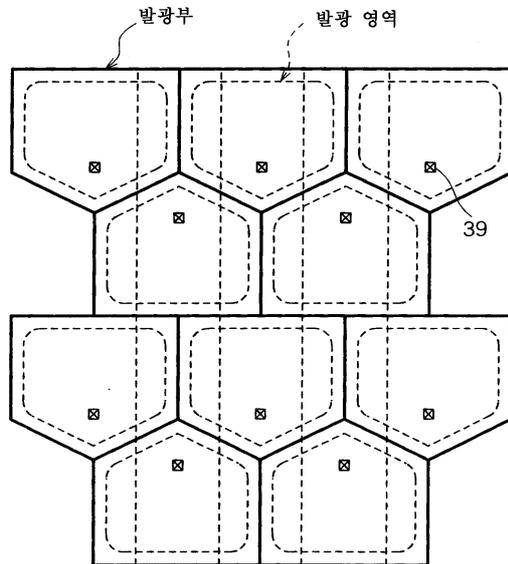
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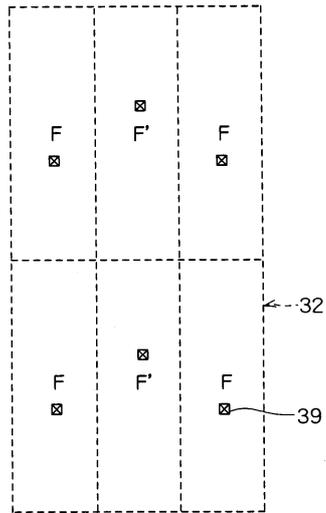
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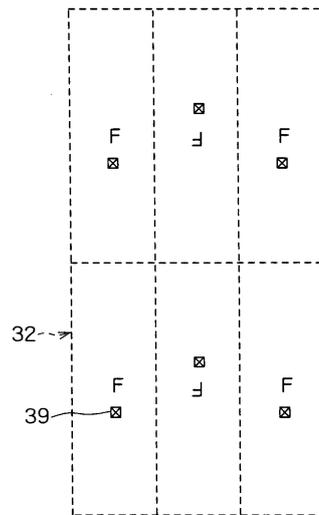
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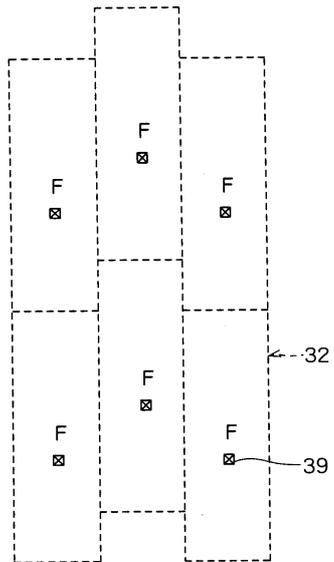
15a



15b



16a



16b

