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(73) 가 가 1 6 6

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가 가 5-2-11

(74)

:

(54)

x 가

가

가

1
2
3
4
5
6
7
8
9
10

가 . 가 .
.
.
.
가 .
.
.

3 -
5 -

(1bit)

SUB :
GL :
DL :
TFT :
PX :
AR :
ARf :
ARb :
CL :
BT :

가

, x

y

y

x

가

conductor)

MIS

가

MIS(Metal - insulator - semi
(Poly - Si)

가

(photon)

1.

, x , y y x

가

x 가

가

가

2.

, x , y y x

가

3.

, x , y y

x

가

《 1 》

가 1

1	SUB1	SUB1	SUB2()	SL(9)
	SUB2	AR			
SUB1	SUB1	x	y	DL	GL
GL	y	x			

1, i, n, ARf, GL, DL, AR, ARf, ARb, DL, (i-1),
 (1f), (1b), (2f), (3f), (4f), H, (7f), (5f), (H), (7f), (4f), V, (V)가, (6f),
 DL, (5b), (3b), D-A, V, (2b), (3b), (6b), (4b), H, (7b),
 H, (5b), (H), (4b), V, (V)가, (6b),
 (9), (10f), (10b), ARf, ARb, AR, ARb, ARf, ARb, GL,
 《 》, 3, 3, 3, 3, SUB1, TFT, poly-Si, SiO₂, 1, GI가,
 1, GI, Cstg, GI, TFT, x, GL, AS, GL, G,
 L, TFT, GI, GT가, GL, SL, GL, SL, 가, GL,
 SL, Cstg, GL

, GL SL SUB1 , SiO₂
 2 IN IN GL DL ,
 Cstg , 2 IN 1 GI CH1, CH2가 ,
 TFT , 2 IN , 가 DL ,
 DL DL SD2가 y DL ,
 DL DL CH1 , , CH1
 DL TFT SD1 , , DL
 DL DL GL GL DL
 () GL GL
 DL GL
 , SD2 CH2 , SL
 SD2 Cstg ,
 DL SD2 SUB TFT , SiO₂
 3 PSV가 3 PSV ,
 , 3 PSV SD2 CH3 ITO(Indium-Tin-Oxide)
 , 3 PSV CH3 , ITO(Indium-Tin-Oxide)
 PX가
 《 5 1 》 1bit , 6 5 -
 , , 가 7 5
 7
 5 SUB1 poly-Si AS₁ AS
 2가 AS₂ AS₁ TFT₁ , AS
 AS₂ TFT₂ TFT₃ TFT₁ AS AS
 1, AS₂ AR TFT₃ SUB SiO₂ 1 GI가
 , AS₁, AS₂ TFT₁ TFT₃ G1 R1 ,
 1 GI x R1 AR GL R1
 , G1 AS₁ 가 AS₂ 가 TFT₁
 TFT₃ G1 R1 SUB SiO₂ 2
 IN IN G1 R1 D1
 , 2 IN TFT₁ , TFT₂ GT3
 , TFT₃ R1 ,
 2 IN TFT₃ CH4, CH5, CH6, CH7, CH8, CH9가 D1 , D1
 TFT₁ y D1 , D1
 AR DL TFT₃ , D1
 가 , G1 GT3 GT3 TFT₂ AS₂
 , D1 GT3 C1 TFT₁ TFT₂ , R
 1 D1, GT3, C1 TFT₁ TFT₂
 PSV가 D1, GT3, C1 SUB SiO₂ 3
 TFT₁ TFT₃

3 PSV ITO(Indium-Tin-Oxide) CL
 CL AR PX
 CL TFT₂
 TFT₁, TFT₃
 CL (ground) 가 TFT₁ TFT₃
 《 8 (a) 》
 (2) (3) (4) (1) () (GND)
 《 8 (b) 》
 9 SUB1 LC SUB2 PNL
 SUB1 POL1 SUB1 POL2가 SUB2 SUB2
 SL BL PNL AR LC
 H SUB1 BL BT가 BL BT 1
 BT AR()
 BL 가 PNL TFT₁ TFT₃
 BL SUB1 SUB2 가
 《 10 PNL 》
 (1f, 1b)
 AR ARf ARb
 (1f, 1b) GL ARf
 ARf ARb ARf
 GL ARb GL
 (Direction A).
 ARf ARb GL
 GL ARb GL (Direction B).
 가 ARf ARb
 EL, OLED

1.

, X

, y

y

X

가

x

가

가

가

가 가

2.

1

3.

4.

1

2

5.

1

2

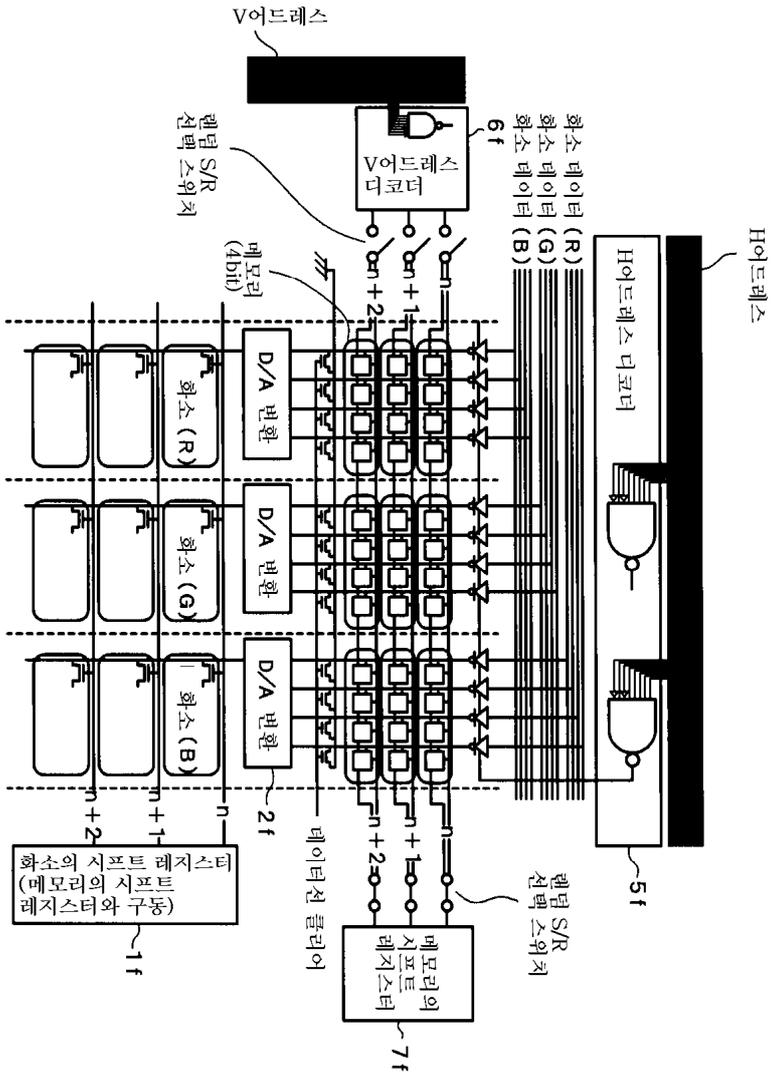
6.

7.

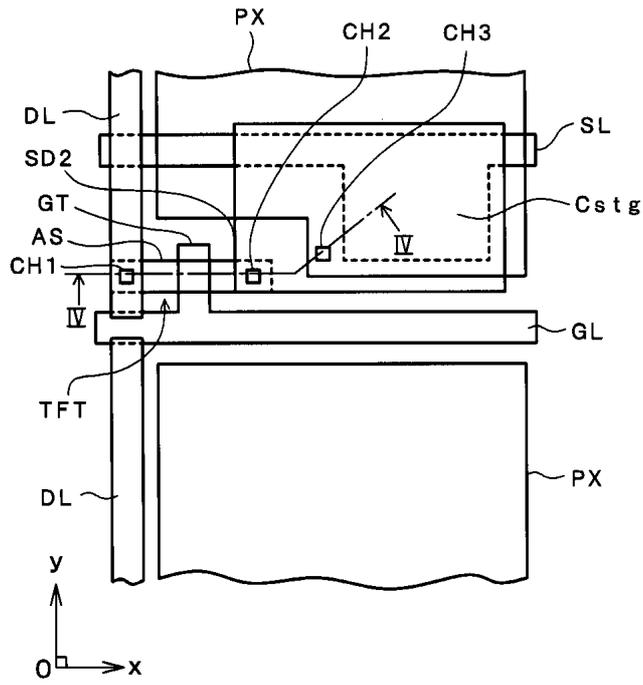
8.

9.

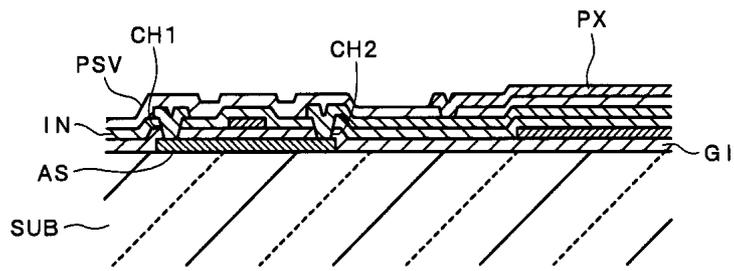
2



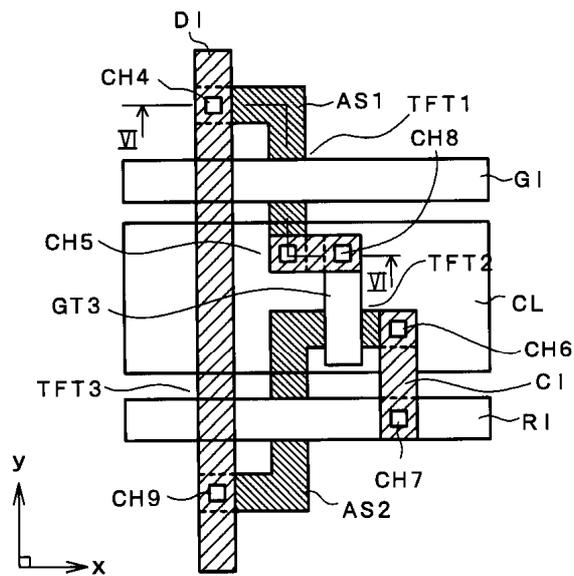
3



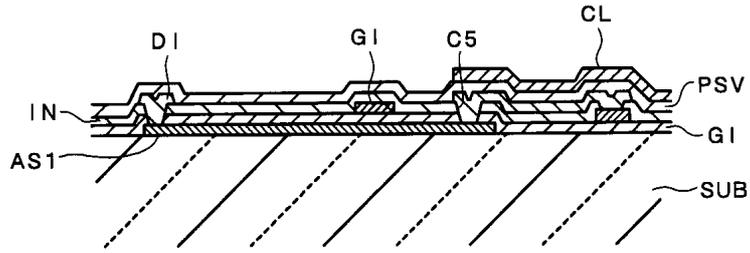
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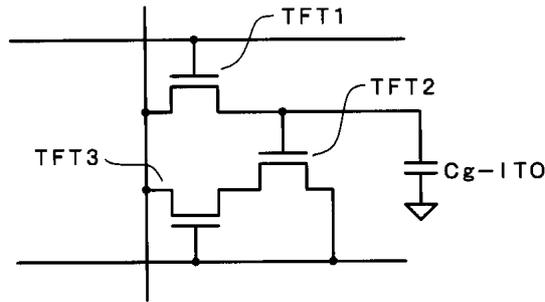
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6

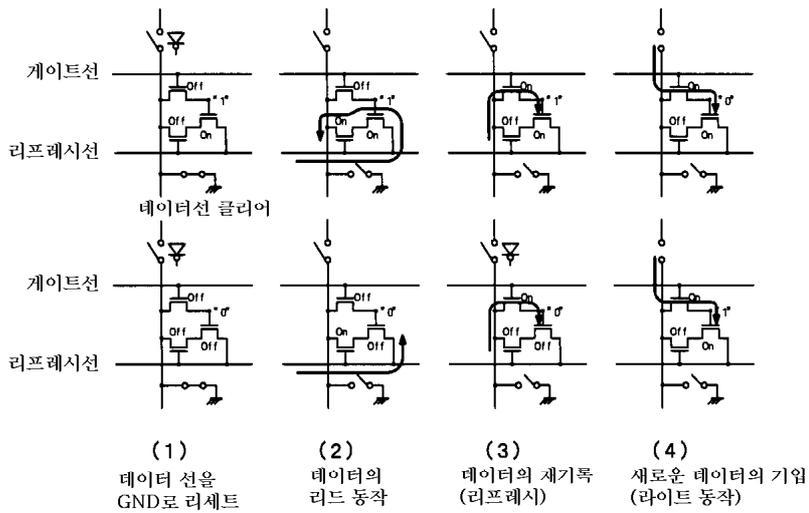


7

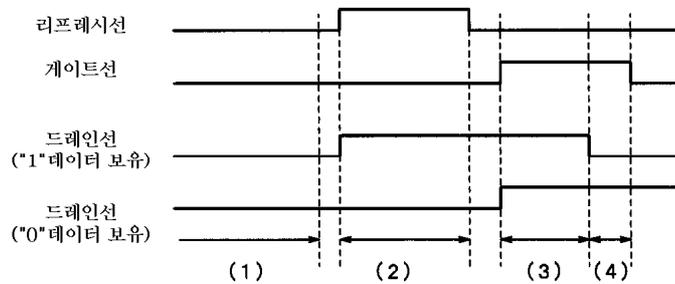


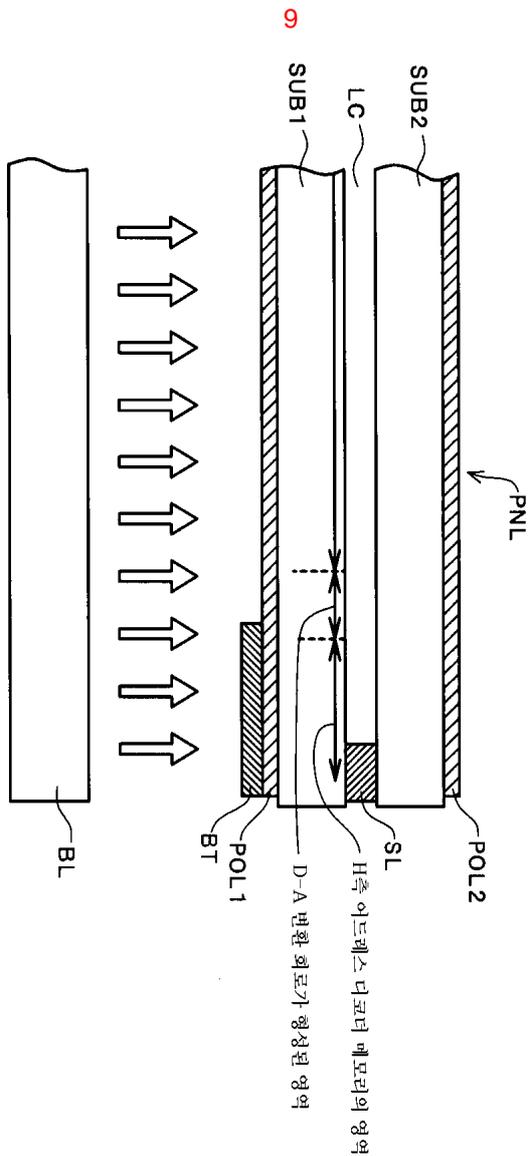
8

(a)



(b)





10

