

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl.⁷
G02F 1/136

(11)
(43)

2003-0052995
2003 06 27

(21) 10-2002-0080612
(22) 2002 12 17

(30) JP-P-2001-00388306 2001 12 20 (JP)

(71) 가 가 가 가 4 1-1

(72) 가 가 가 가 4 1-1

가
가 가 가 가 4 1-1

가 가 가 가 4 1-1

가 가 가 가 4 1-1

(74)

:

(54)

6) , , 1 (24a) 1 (25) (26) , 1 (2)
(24a) , (21) , 1 (25) 2 , ,
, 1 (25) , 1 2 , .

1			
2			
3a,	3b		
4a			4b
() XIV-XIV ()			
5			
6a,	6b		
7	1	()	
8	1		
9a	9p	1	
10a	1		
() , - , 10b			
11a	1		
() , - , 11b			
12a	12h	2	
13a	13d	2	
14a	14f	3	
15	3		
16a	3	, 16b 16a IV-IV	
17a	3	, 17b 17a VI-VI	
18	4		
19a	18	IX-IX	, 19b 18 X-X
20	5		
21a	20	XII-XII	, 21b 20 XIII-XIII

< >

101 :

102 :

103 :

104 :

105 : TFT

106 :

(, TFT) 가

TFT(, pSi-
TFT)가
(, TFT) , TFT
가
TFT 가 가 , 가
TFT
10-170953 TFT ,
TFT 가
1 , TFT TFT , 가
가 TFT
(4a, 4b)
1 TFT 1 (5)
2 (6a) 1 (7a)
TFT 1 (5) 2 (6b) 2 (7a) 2 (6a) (7b) TFT TFT
, TFT (5, 6b)

2

, TFT , , (75) (4be) (4ba, 4bb)
 , 5 (4bc, 4bd) LDD(Lightly Doped Drain)
 , (4be) (4bc, 4bd) (75)
 , (4bc, 4bd)
 .
 .
 TFT , LDD TFT , 6a
 , TFT TFT 1 (71) 1 (72)
 , (73a) TFT LDD (73a)
 , 1 (72) (4a) (4aa, 4ab)
 (73a) (4b) (4ba, 4bb)
 , (73a) 6b TFT ,
 (73a)가 (73b) (73b) (4ba, 4b)
 b) (4bc, 4bd) (4bc, 4bd)
 (4be)
 , 1 (72) (73b) 1 (71)
 5 1 (71b) , 1 (72) 1 (73b) (71a) , (73b)
 1 (73b) , 2
 .
 , 5 TFT (4be)
) 2 (74a) (75) , 2 (75) 1 2 (71b, 74a) 2
 2
 , 5
 1 , 76a 76d , 77a 77d / , 5 , 76
 2 , 78

, 1 , 2 (5) 가
 , TFT (4a) (4a) (13) , TFT
 TFT 가
 , 3a , 1 (5)
 (4a, 4b) (3) (4a, 4b) (3) 「
 (3) (scraped portion)(14)」
 , 3b , 2 (6) (7)
 , 4a, 4b , (9c) (7a)
 , TFT 2 (6a) , TFT (4a)
 가 (6a)
 , (4a)
 (4a)
 , TFT 가
 , TFT 가
 , TFT가 가

가 TFT (4a) (1) 가 (4a, 4b) TFT
 가 6a, 6b (4ba, 4bb) 가 (4bc, 4bd) (75) LDD
 5 (71b, 74a) 가
 가 TFT TFT LDD TFT
 가
 1 2 1 2 1
 1 1 1
 1
 1 1
 1 2 1 2
 1 2 1 2
 1 2 1 2
 1 1 1 1 1 1 1 1
 가 가
 1 1 1 1 1 1 1 1
 가 가
 1 2 1 2 1 2 1 2
 1 1 1 1 1 1 1 1
 1 2 1 2 1 2 1 2

ITO

1 2 2 1

1 1 1 1 2 1

2 2 2 2 1 2 2 2 3 1

1 3 3 1 3 1 3 1

가 3 3

ITO

(1)

()

7 1 () 8

XGA(1024×768)

R(), G() B() 3

(101), (102), (103) (104)

Vsync V_{gnd} 가 () RGB, Hsyn

V_H (18V), V_L (3.3V

(104) TFT(, n TFT 3072(1024×RGB) , 768 가 , n

05) () (106) TFT (107) TFT (105) , TFT(1

(106) , TFT(105) (110) , CF (

(104) , 3072 (108) , 768

(109) , TFT(105) (111)

TFT(105) (109) (108)

(111) (110) (107)

(107) (110) (111) ,

(101) , Hsync Vsync , 1
DSI , 1 DCLK , 1

GCLK (101) , V_L n TFT p TFT(p T
FT)

(102) , (102a), (102b) (102c) .

(102a) 3072 (102a) DSI
, DCLK (3.3V 5V)
(102a) V_L n TFT p TFT

(102b) , 3072 3072 (102a)
(18V) V_H n TFT p TFT (102b) , V_L

(102c) 3072 3072 (102c)
(108) (102c) , (102b)
B) , V_H RGB(R , G
FT n TFT p T

(102) , 1 DCLK , (104) 3072
(108) R , G B

(103) , (103a), (103b) (103c) .

(103a) 768 (103a)
, GCLK (3.3V 5V)
(103a) , V_L n TFT p TFT

(103b) , 768 768 (103c)
(109) (103c) , (103b)
H n TFT p TFT (109) (103c) , V

(103) , 1 GCLK , (104)
768 (109)

(104) TFT(105) , (109) 가 ((106) (107) ()
108) RGB(R , G B)가 RGB
RGB가 (106) (106)

(103) , (104) TFT TFT , (102) (101)
(102) (18V) (103) TFT , (3.3V 5V) TFT ,
TFT

()

3 TFT TFT TFT TFT

p TFT n TFT , .

9p TFT TFT

, 8 - .

, TFT , 9p (21) (22a)

(22b) (22) (22) TFT

1 (24a) 1 (24ac)

(24a) , TFT / (24aa, 24ab)

(22) 1 (24a) , 가 30nm (SiO₂) (28a)

(28a) , 가, (29a)

TFT , (24aa, 24ab)

(28a) (29a) , 가 90nm (31) 가 350nm

(SiN) (32) (32) (32) (34a, 34b)

(33a, 33b) , (32) (24aa, 24ab)

LDD , TFT , 가 30nm (28a)

(29a) , 가 (24aa, 24ab)

TFT LDD , 가

, TFT , 9p (21)

(22) (22) , TFT (24b) TFT /

2 (24b) 2 (24be)

n (24ba, 24bb) (24be) , n LDD (

24bc, 24bd)

(22) 2 (24b) , 가 90nm (25a) 가 30nm

(28b) (29b) (29b) (109)

(29b) (111)

bd) TFT , 가 (29b) , LDD (24bc, 24

가 LDD (24bc, 24bd) , 가

(29b) (31) 가 350nm (32)

(32) (32) (/) (34c, 34d)

(24ba, 24bb) (33c, 33d)

/ (34c) (108) / (34c, 34d)

(28b)) TFT , 120nm ((25a) +

, TFT , TFT LDD

, p TFT , 가 , p TFT LDD , LDD

2 (24b) (29b) 가 11b , ,
 (29b) 2 (24b) (25a, 28b) . ,
 TFT 가 .
 , (30a, 30b) .
 , 9m , (29a, 29b) (28b, 25b) ,
 (28a) (24a, 24b) (P) , 가 25keV, $7 \times 10^{14} \text{ cm}^{-2}$ 1 2
 TFT 1 (24a) (/) (29a)
 2 TFT (24b) (29b) (28b, 25b)
 TFT (/) (24ba, 24bb) . ,
 (/) .
 , (29a, 29b) , (28b, 25b) 가 , ,
 가 70keV , $2 \times 10^{13} \text{ cm}^{-2}$, ,
 TFT (29b) (28b, 25b) , (/
 /) (24bc, 24bd) . , TFT
 LDD TFT 가
 , 1 (24a) , 1 (24a)
 .
 , 9n , CVD (21) (31) 9
 0nm (32) 350nm .
 , 9o , TFT (24aa, 24ab)
 (32) (31) (33a, 33b) , TFT
 (24ba, 24bb) (32) (31) (33c, 3
 3d) .
 , 9p , (21) , Ti 100nm, Al 200nm,
 Ti 50nm (32) (33a, 33b, 33c, 33d)
 , (/) ,
 , TFT (24aa, 24ab) / (34a, 34b)
 , TFT (24ba, 24bb) / (34c, 34d) .
 , (104) , / (34a 34d) , (10
 8) (101), (102) (103) , /
 (34a 34d) , 가 3.
 0 μm (35) .
 , 가 . ,
 .
 , (35) , (21) / (34d)
 , 가 70nm ITO(indium-tin oxide:)
 . , TFT
 (36) (21) , (가
) () .
 , TFT .
 , , Cr() ,
 , 1 , ITO ,
 , .

TFT , , 가 .

1 , 9f , TFT ,

(28) , 1 (24a) 가 TFT

가 (25) , (25)

1 (28) (29) , 9l (29a)

1 (24a) (30a) , (29a)

(28a) 10b , (25b)

1 (24a) (28a) 가 TFT가

1 (24a)

9c, 9d , TFT , 1 (24a) (24a) (21)

(26) , 1 (24a)

(25) , TFT 가 가 , 1 (24a) (24a)

(2)

2

()

2 , TFT TFT , 12h TFT

TFT , p TFT n TFT

12h n TFT , n

TFT

TFT , 12h (21) 가 50nm

(22a) 가 200nm (22b) (22) 1 ()

24a) (22) TFT 가 40nm (24a) , TFT / (

)(24aa, 24ab) (24ac)

(22) 1 (24a) , 가 30nm 1

(51a) (51a)

1 (51a) , 1 (54a) (24aa, 24ab)

가, (54a)

1 (51a) 1 (54a) , 가 370nm (1) (55)

(57a, 57b) , (55) / (57a, 57b) (24aa, 24ab) (56a, 56b)

(24aa, 24ab)

TFT , 1 (51a) 가 30nm

LDD , 가 (24

aa, 24ab) 1 (54a) , 가

TFT LDD , 가

가

TFT , 12h (21)

(24b) (22) 2 (24b) TFT / 2 n
(24ba, 24bb) (24ba, 24bb) (24be) (24be) n (LDD) (24bc, 24bd)

(22) 2 (24b) , 가 10nm (51a) 가 100nm
(52a) (52a) 2 (54b) 가 2
(54b) (51a) (52a)

TFT , 2 (54b) , LDD (24bc, 24bd)
24bd) 가 LDD (24bc, 24bd) ,
가

2 (54b) (51a) 가 370nm (55) (57c, 57d)
(55) / (56c, 56d) (24ba, 24bb) / (57c, 57d)

(52a)) TFT , 2 110nm ((51a)+
, TFT , TFT p TFT LDD LDD
, p TFT , 가 , LDD , LDD

()

12a 12h
TFT TFT

12a 50nm CVD (21) (22b) 200nm (21) (22b)
2a) 40nm
b) , 450

()

1 (24a) 2 (24b)

CVD (52) 100nm (21) (51) 10nm
(52)

2b TFT (53) 1
(53) (52) (51) (53)

12c (51) (52a) (51a)

2MPa, 550, 1, 가 .

1 (24b) (24a) (51a) (51a) 1 2, 2 (52a) 2

12d, Al-Nd 300nm, TFT 1 (51a) 1 (54a) TFT (54b) 2 (51a, 52a) 2 (54b) 2 (52a)

12e, 1 (54a) 1 (24a) (24b) 2 (54b) 2 (51a, 52a) 2, 가 25keV, 7×10¹⁴ cm⁻² 1 (54a) 1 (24a) n (24aa, 24ab) 2 (51a, 52a) 2 (24b) n (24ba, 24bb)

1 2 (51a, 52a) 2 (24a, 24b) 2 (24b) 2×10¹³ cm⁻² (54b) 가 70keV (24ba, 24bb) 2 (24b) n (LDD) (24bc, 24bd)

12f, CVD (21) (55) 370nm

12g, (1) (55) SF₆ 가 (24a) (24aa, 24ab) (56a, 56b) 2 (24b) (56c, 56d)

12h, (21), Ti 50nm, Al 100nm, (56a, 56b, 56c, 56d) () TFT (/) (24aa, 24ab) / (57a, 57b) (/) (24ba, 24bb) / (57c, 57d)

(57a 57d) (104) (108) (101), (102) (103)

가 3.0μm (2) (58)

21) (58) / (57d) (59) ITO (60) (21) TFT (가) () TFT Cr()

ITO

TFT

가

2 (52) 2 (24a)

가 (51) 1 (52) 가

TFT TFT TFT TFT

(24a, 24b) (22b) (51)

(24a, 24b) (22b)

(52) 2 가 (52)

(51) 1 (51a) 가 1 (51a)

(24a, 24b) (51)

(24a, 24b) (51) 1 (51)

(52) 가 1

1 (24a) 2 (24b)

(51a) (51a) (52a)

(

13a 13d 2

13a 1 가 (21) 50nm (22a)

200nm (22b) 40nm (1)(24)

CVD 10nm 1 (1)(62) 10nm

(2)(63) 100nm 2 (2)(64)

13b TFT (65)

(65) (64) 2 (2

)(64a) (65)

13c 가 (63) 1

(2 2)(63a) 2

(2 2)(63b)

(63a), 2 (64a)

2 (63b) 1

(63a) (24) 2 (63b)

(24) 1 (63a) 13d 1

1 (24a) 2 (24b) (63b)

2 (63a) (24a) 1 (62)

1 (65)

, 2 (24b), 1 (65), 2 (62) 2 (64a) (63b) 2

12d 12f 가 , , 1 2

(64) 2 가 (64a) 13b (63) (64) 1 가 (24a) 1 TFT (64) TFT TFT

13d (64) 2 (63) (24) (22b) 가 (22b) (63) 1 2 (24a, 24b) (24a, 24b)

(64) 2 가 (63) (63) (63a) 1 (62) 1 가 (3)

3 T(, TFT TFT) , n TFT p TFT TF TFT(, TFT TFT) , n TFT p TFT n TFT n TFT

16a 16b TFT 14f 16a IV-IV

가 TFT(1) , 16a, 14f 1 (24a) , 30nm 1 (1) (1) (82) 1 (81a) , 300nm 1 Al-Nd (1) n / (24aa, 24ab) 1 (24a) (24ac) (24ac) , 1 (81) a) 1 (82)

400nm (87a, 87b) , 200nm Ti /Al /Ti 1 (87) , 1 (87) / (88a, 88b) 400nm (24a) 1 (82) 2 (89) 1 (87) 1 (87a, 87b) 1 (24a) / (24aa, 24ab) 2 (8) 9) / (88a, 88b)

TFT , 16a, 16b (82) , 2 (84c 84f)(83b) (24a) 300nm 2 Al-Nd (2)

17a VI-VI TFT 17a VII-VII 14f

가 TFT(2) , 17a, 14f
 1a) 50nm 2 (24b) , 30nm 1 (8
 (2) 2 (83b) 2 , 300nm 2 Al-Nd
) n / (84a) 2 (24b) (24be)
 2 (84a) 2 (24ba, 24bb) 2 (24be) 2

, TFT(2) , (1)(87) / (88c, 88d) ,
 / (88c, 88d) (2)(89) (87) 2
 (24b) 2 (84a) / (88c, 88d) (87)
 (87c, 87d) 2 (24b) / (24ba, 24bb)

, TFT , 17a, 17b , 2 (84a) , 2
 (24b) 1 (81b) 1 Al-Nd (82
 b, 82c) .

, 3 , TFT , 1 (1
 24a) , 1 (82) , 2 (83b) 1 (8
 (84c 84f) . , 1 (24a) 1 (84c 84f)
 1a) 1 (82) , 1 (82) (24a) (24a)
 , TFT , 1 (24a)
 가 , 1 (24a)

1 , TFT , 2 (84a) , 2 (24b)
 1 (81b) (82b, 82c) , (82b, 82c)
 2 2 (24b) (24b) , 2 (84a)
 , 가 , 2 (84a)

, 3 14a 14f .

14a , (21) 50nm (22a) 250nm
 (22b) , (22a) .

, 50nm , 400 가
 . , 300mJ/cm² ,
 , 1 2 (24a, 24b) .

, 1 2 (24a, 24b) 30nm 1 (1)(81)
 CVD , 300nm 1 Al-Nd (1) PVD
 , 1 (24a) 1 (81) 1 (82) .
 , 1 TFT 2 (84a) , 2 (24b)
 , 1 (81) , 17a, 17b 1 Al-Nd (1
 82b, 82c) .

, TFT , , TFT (8
 1) , 1 (82) (Cr) ,

, 14b , 70nm 2 (2)(83) CVD
 , 300nm 2 Al-Nd (2)(84) PVD .

(85) (84) (85) (84) (85) (84) (85)

(85) (84) LDD (85) 2

(84a)

(24a) (24a) (84c) (84f)

(83b, 83c) 16a, 16b 2 Al-Nd (84) (84c) (84f)

(83) (85) CHF₃ 가 (85) (81a) (81b, 83a)

(81) (82) (82) (84a) 1 2 (81b, 83a)

(86)

(24a, 24b) 1 (81c)

10nm

(85)

(82) 1 (24a) (24aa, 24ab) (24b) (24ba, 24bd)

(84a) 2 (83a, 81b) (84a) 10kV, 1×10⁻¹⁵/cm⁻²

(84a) 2 (84a) 2 (83a, 81b) LDD (24bc, 24bd)

(84a) 2 (83a, 81b) 100kV, 1×10⁻¹⁴/cm⁻²

p TFT가 p TFT가 10kV, 1×10⁻¹⁶/cm⁻² p TFT

400 (24a, 24b) (24a, 24b)

250mJ/cm²

14f CVD (87) TFT (87) 400nm (24aa, 24ab) (24ba, 24bb)

(87a, 87b) (87c, 87d)

PVD Ti /Al /Ti 3 (24aa, 24ab) (24ba, 24bb) (88a, 88b) (88c, 88d)

CVD 400nm (88a, 88d) (89)

TFT (88d) (89) (89a) ITO ITO

(89a) (88d) (90) 1 2

(85) 2, 2, 3, Al-Nd, (85) 2, 14c, LDD, (83, 81)
 14e, (84a), LDD, (86) 2, (86)
 (24b) LDD, (86) 2
 DD, 가, (84a), (86) L
 14c, 14d, 가, (81a, 86), (24a, 24b)
 가, (24a, 24b)
 (4)
 4
 TFT(2¹)가, TFT, TFT(1
 TFT가, TFT
 4
 18, 4, 14f, 19a, 18, 1
 8 VIII-VIII, TFT, 19b, 18, X-X
 18, (110)(90), TFT / (88d) / (84a)
 24bb), (82c), TFT, (90), (82), (111)(82c), TF
 T / (88d)
 (108) / (88c), (109), TFT, 2, (84a)
 a) (24ba)
 TFT, 14f, 2, (86), 2 Al-Nd, (24b), 1, 2, (84a)
 81b, 83a), 2, (24b), (24be), (24be), 2, (24ba, 24bb)
 가, (90), (86) 2
 (84a)
 (82c), 19a, 19b, 2, (83d), 2 Al-Nd, (84f), (88d)
 19a, 2 Al-Nd, (84f), TFT / (88d)
 19b, 2 Al-Nd, (84f) / (88d)
 (90), / (88d), Ti (88da)/Al (88db)/Ti (88dc) 3
 14f
 TFT, 14f

4 TFT 1 (82)
 (108) (108)
 2 (86) 2 (83a) (83d) 2 (84a)
) (84f)
 , ITO
 (108)
 3
 (82c) , TFT
 (82c) , 1 (82) 1 Al-Nd
 TFT 2 (86) 2 (83) (82a)
 2 (83d) 2 (83d) 2 Al-Nd (84f) 2 (84a)
 / (88a 88d) (84a) (109)
 (108)
 3 (88d) (89a) (89) , PVD , 100nm ITO /
 (90)
 (21) , (가)
)
 , TFT
 , Cr()
 , 1 ITO
 TFT
 , 가
 (5)
 5
 5 TFT , 4 가 , TFT ,
 TFT , T T (110)(90) (108)(88c) ,
 (111)(82c) (109)(84a) , (90)
 4 , (82c)
 20 5 TFT , 14f 21a 20 XII-XII 2
 0 XI-XI 21b 20 XIII-XIII
 , TFT TFT , 4
 (82c)(111) , 21a, 21b TFT 1 (82)
 1 Al-Nd (1) , (82c)

, 1 TFT 1 (81a) 1 (81e)
 , 1 2 (24a, 24b) 3 3 (24c)
 (82c) 3 p (90) 3 p 3
 (24c) , 1 (81e) 3 , 3
 , p 가 3 가 , TFT n TFT n
 , 17a, 17b , TFT (82a, 82b) 가
 ((82c) , TFT (82a, 82b)
 ((82c) 가 , 3 p
 , 5 , 3
 , (82c) , TFT
 3 (24c) , 1 2 (24a, 24b) , 1 (81) 1 (82c) 1
 1 (81e) (86) (82)
 Al-Nd 1 (82)
 , 3 (88d) (89a) (89) , PVD , 100nm (89) ITO , /
 (90) ,
 , (21) , (가) ()
 , TFT
 , Cr() ,
 , 1 ITO
 , TFT
 , 가
 , 5 ,
 , TFT 1 (82) (108)
 2 (86) 1 (81b) (81e) , 1 2
 (24a, 24b) (24c)
 , ITO ,
 (108) ,
 , TFT 17a, 17b (82a, 82b) ,
 (82c) (82a, 82b) (82c)
 , 가 (82a, 82b) 가
 ,

가 , EL

,

TFT

(57)

1.

1 2 ,

1 2 1 ,

1 ,

1 ,

1

1

2

1 1 2 ,

2

1 1 2 ,

2

2.

1 ,

g , h , i , UV

3.

1 2 ,

1 2 ,

,

2

,

1

,

1

,

2

2

,

1

1

,

2

2

.

4.

3

,

1

2

,

.

5.

3

,

2

,

.

6.

3

,

1

,

1

2

,

,

2

1

2

.

7.

1

,

1

1

2

2

,

2

2

,

2

,

2

2

,

2

2

,

2

2

,

2

1

1

,

2

1

,

2

2

2

1

1

2

,

1

2

2

1

2

,

1

2

,

1

1

,

2

2

.

8.

7 ,
1 , 2
.

9.

7 ,
2 2 2 , 2
2 .

10.

7 ,
2 2 , 2 2 2 ,
2 2 ,
2 1
.

11.

1 / 1 1 , 1
1 1 1 1 ,
1 / 2 2 , 2
2 1 2 2 2 , 2
2 2
1 1 , 1
2 2 ,
2 2 , 2
1 2 , 2
1 1 .

12.

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

[illegible]

12 **13.** ,

1 2 , 1

1 2 1 , 1

.

12 14. , 1 1 , 1 1 1 2 , 2 1 .

16.

1, 2, 2 /

, ,

1, 1, / 1

, 1, 1, ,

1, 1, 1,

2, 2, / 가

1, 2, 2, 2,

2, 2,

, 1, ,

2, 2

.

17.

1, 2, 2 /
1, 1 / 1
1, 1, 1
2, 2 / 가
1, 2, 2, 2, 2
1, 2, 2, 2
1, 3 / 3, 1
3

18.

17

1 2 n 3 p

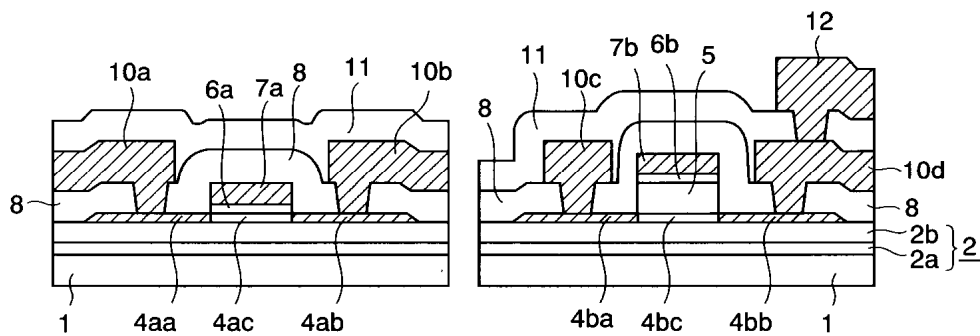
19.

17

1, 2 3

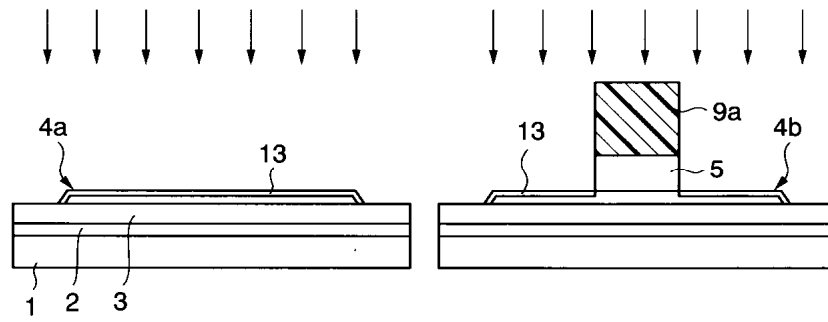
1

(종래 기술)



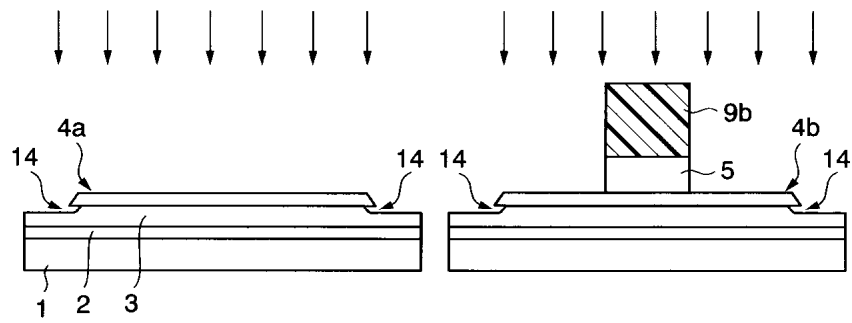
2

(종래 기술)



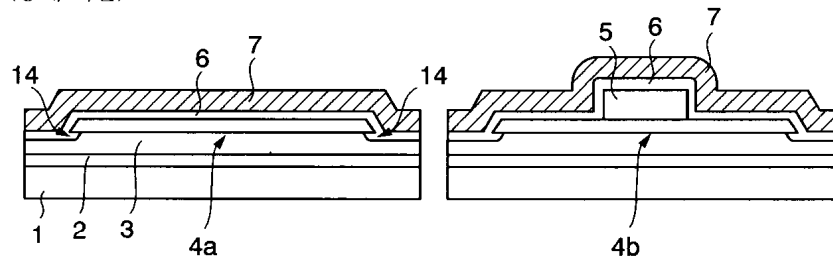
3a

(종래 기술)



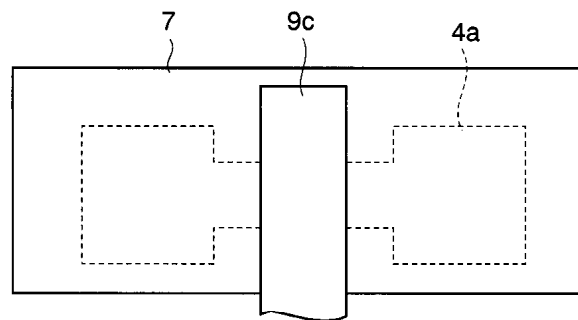
3b

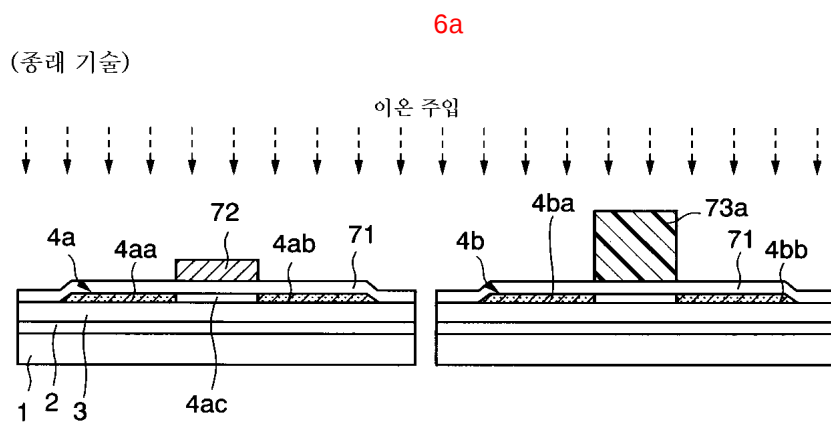
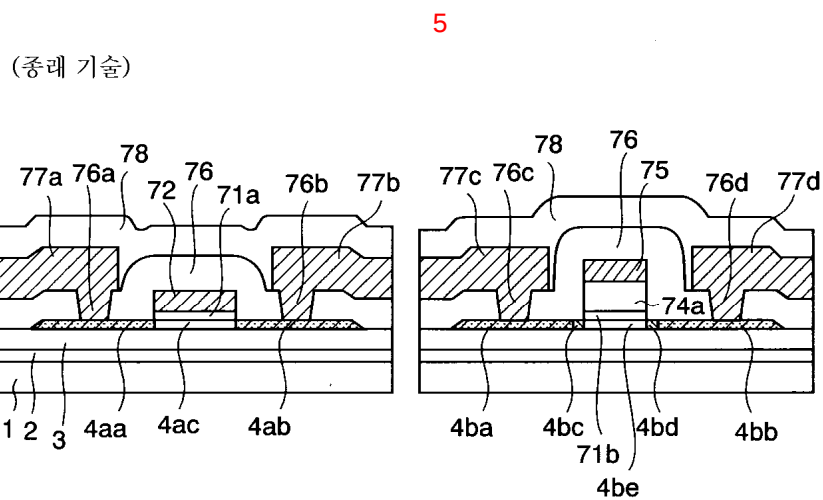
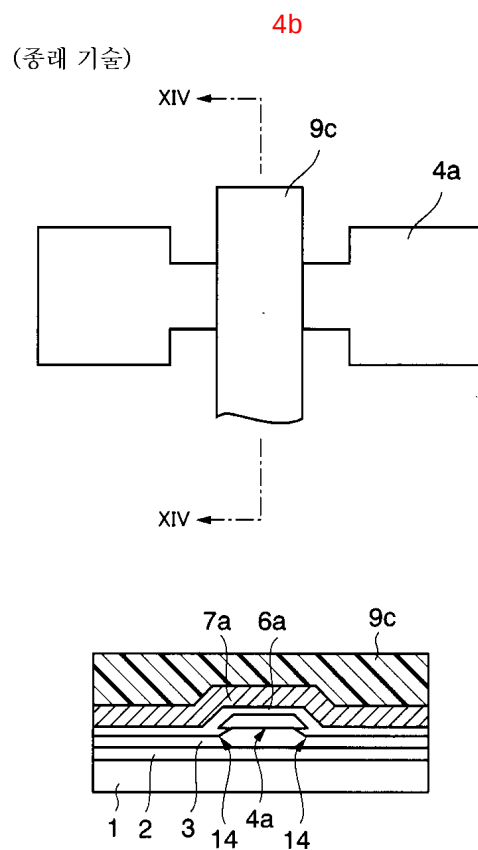
(종래 기술)



4a

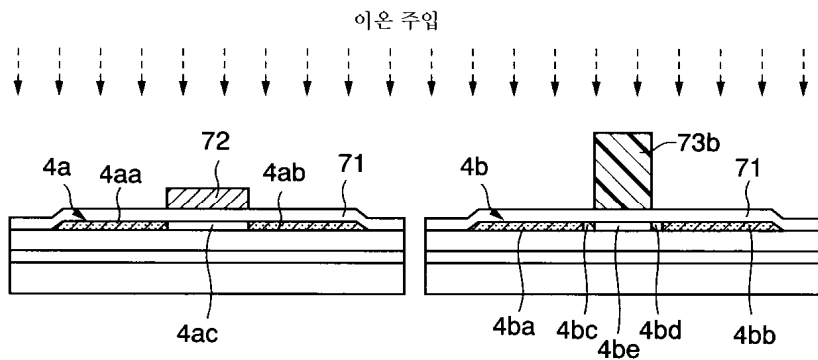
(종래 기술)



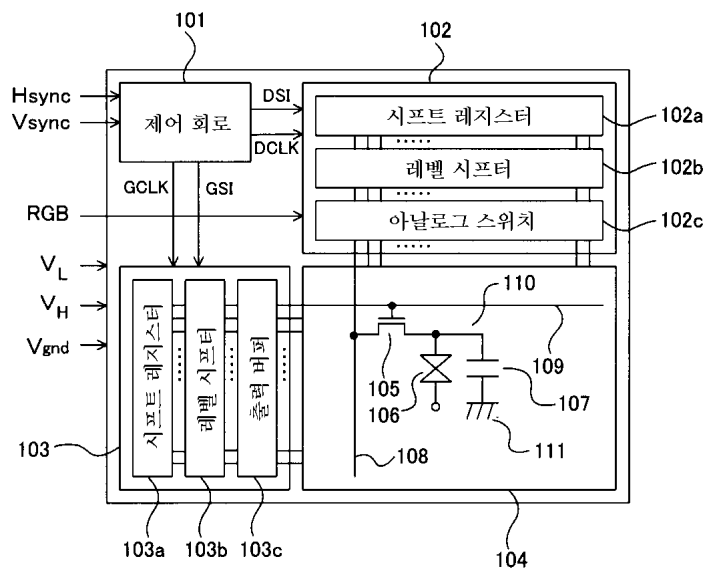


6b

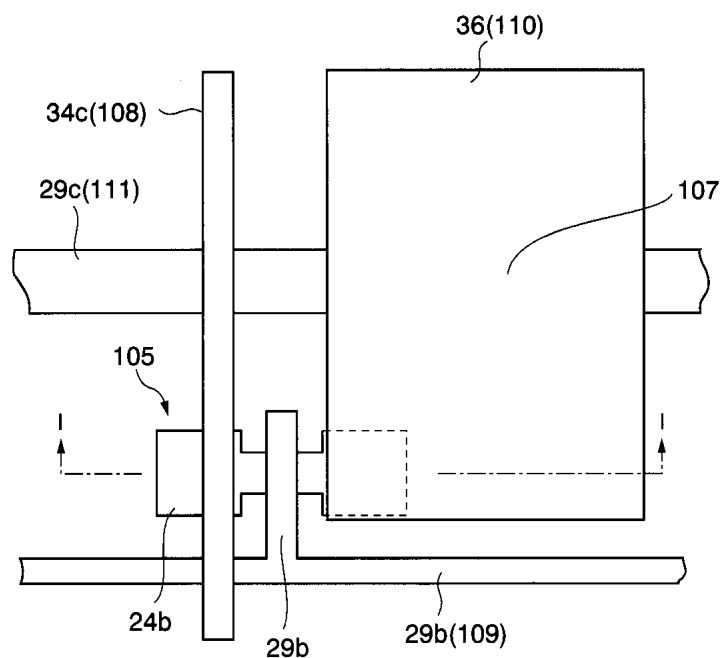
(종래 기술)

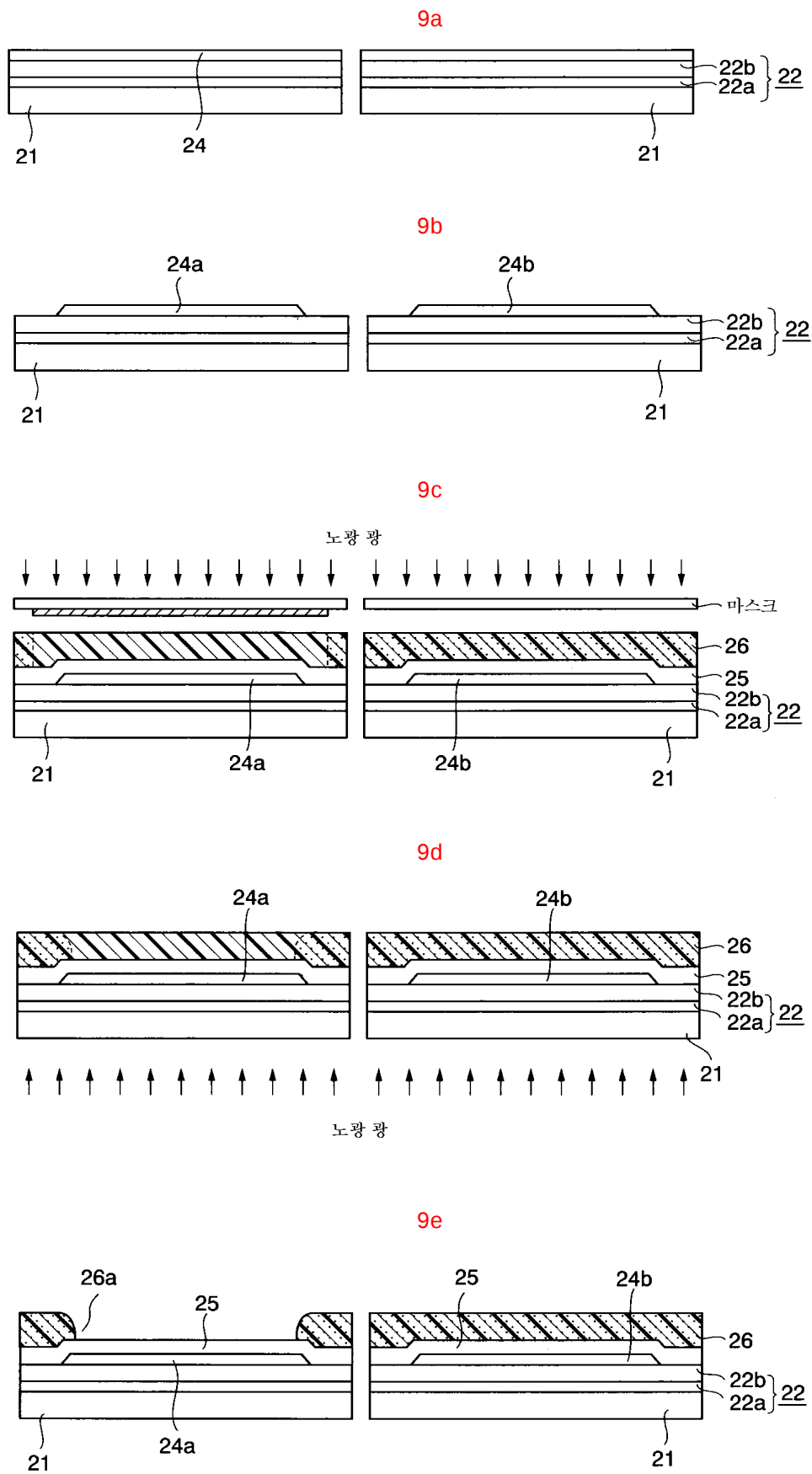


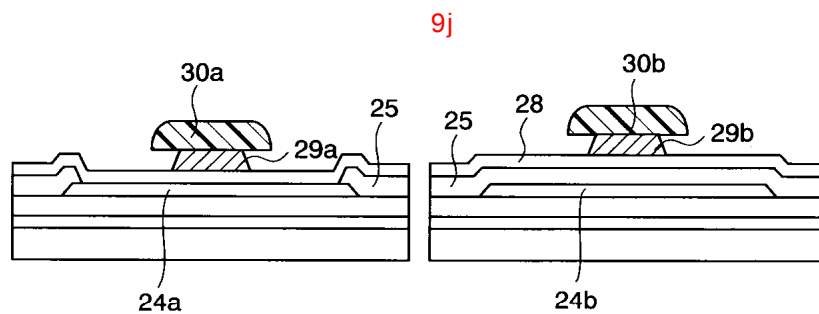
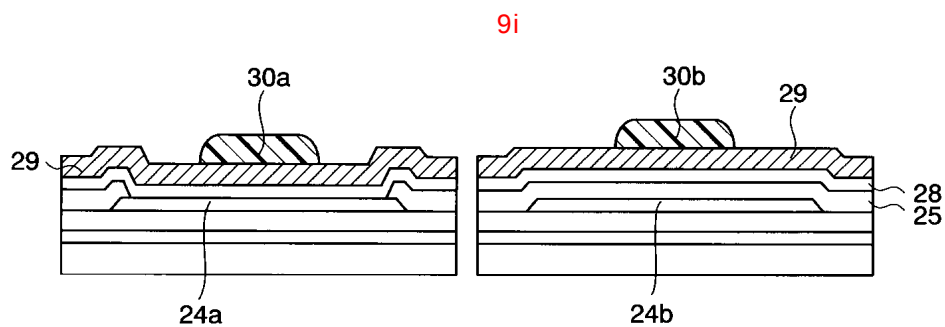
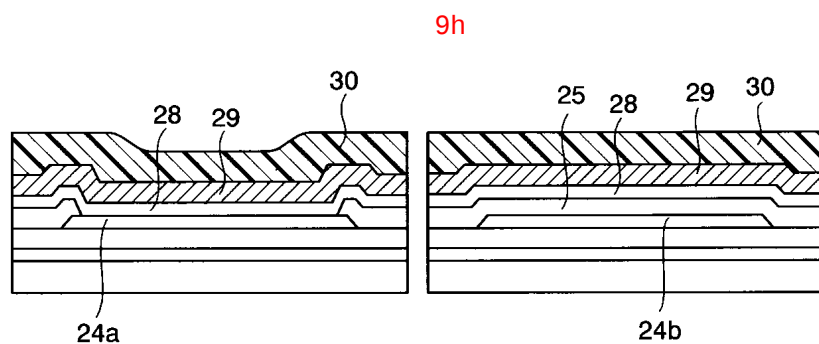
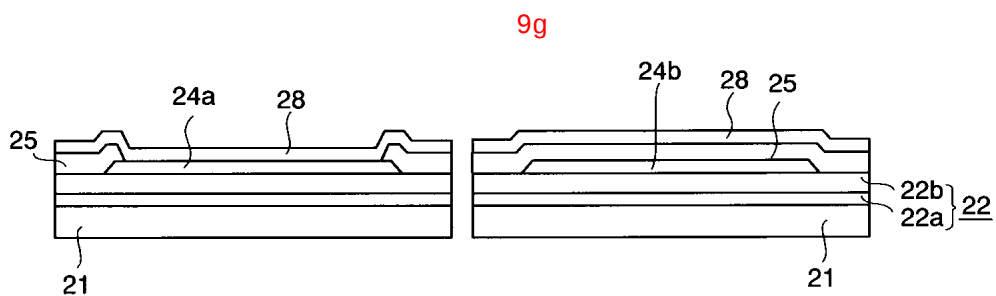
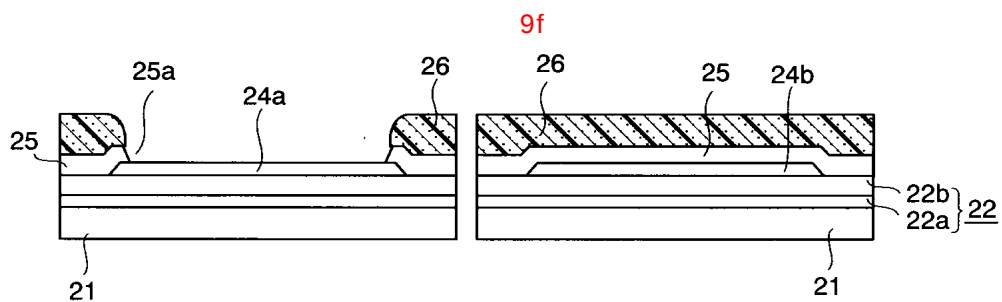
7



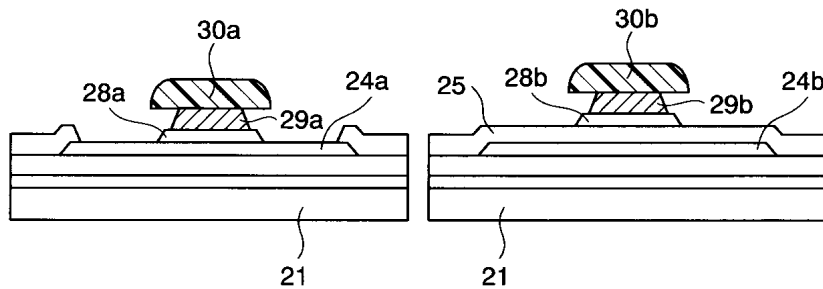
8



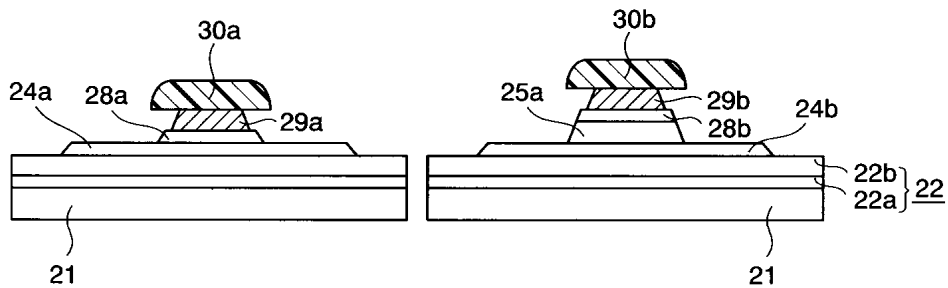




9k

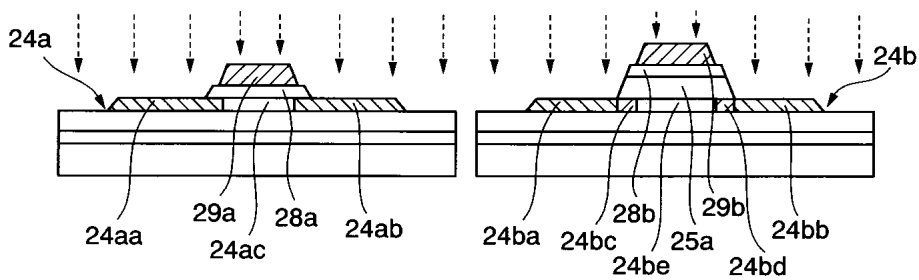


9l

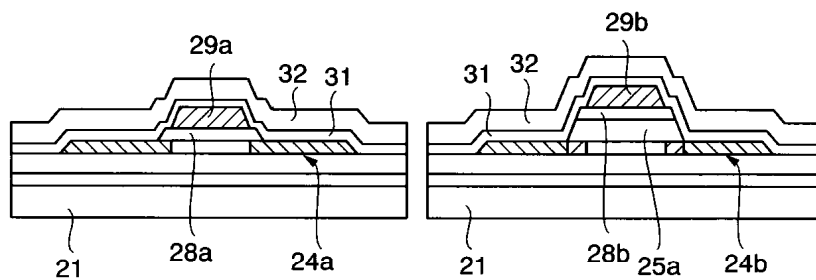


9m

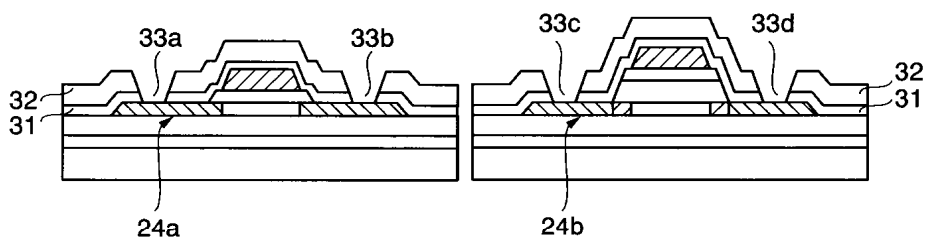
인 이온

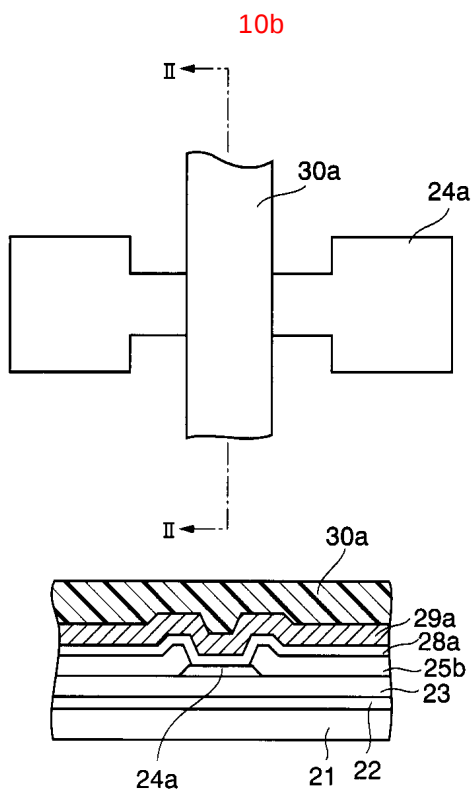
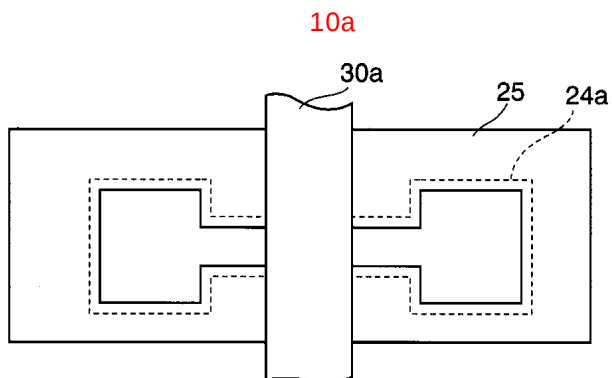
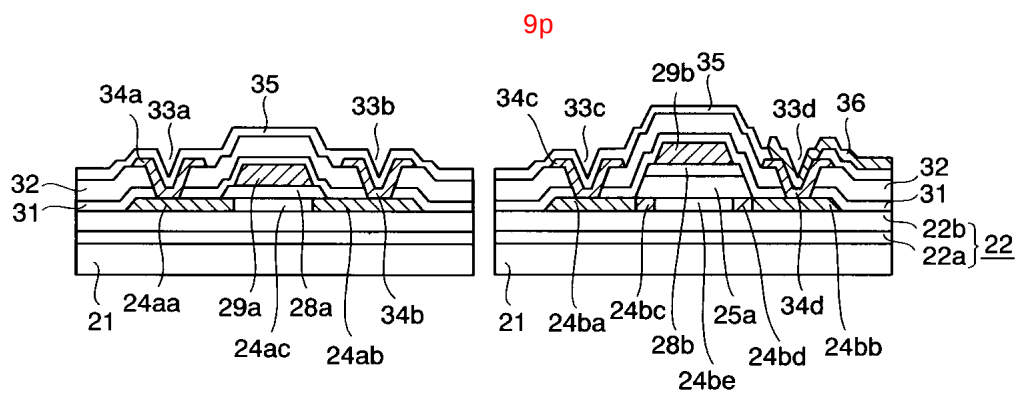


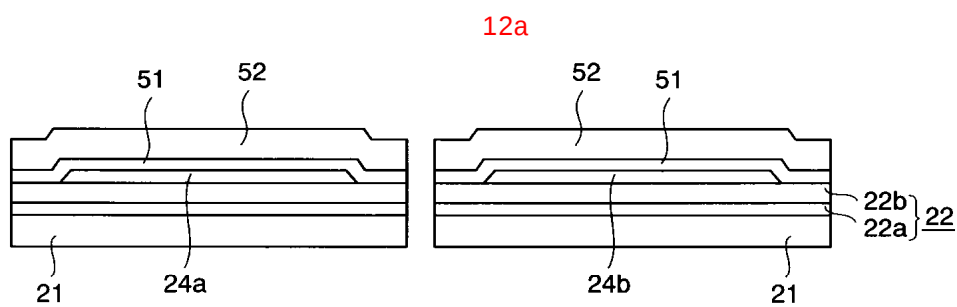
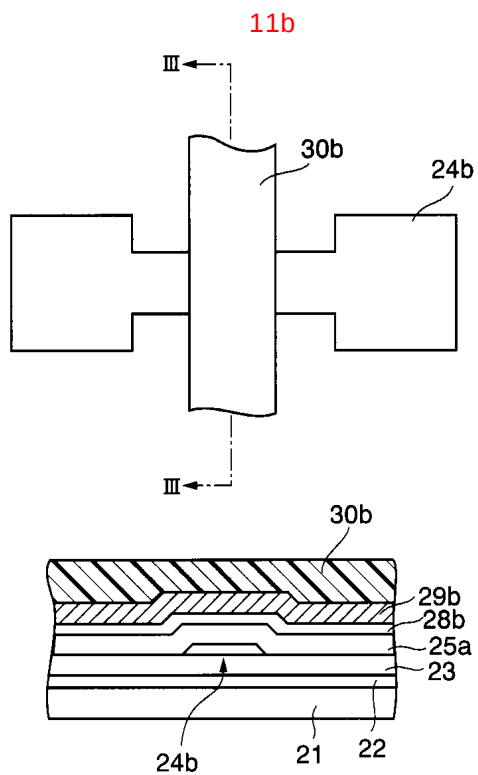
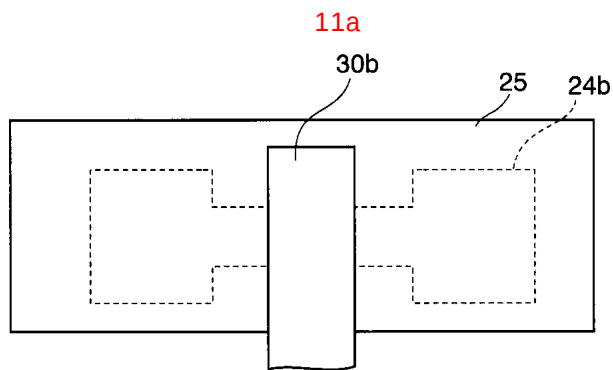
9n



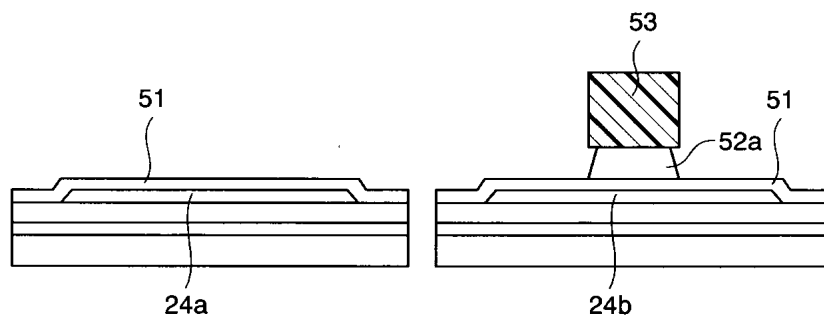
9o



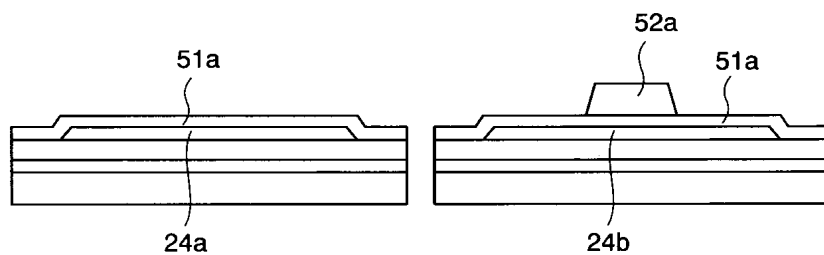




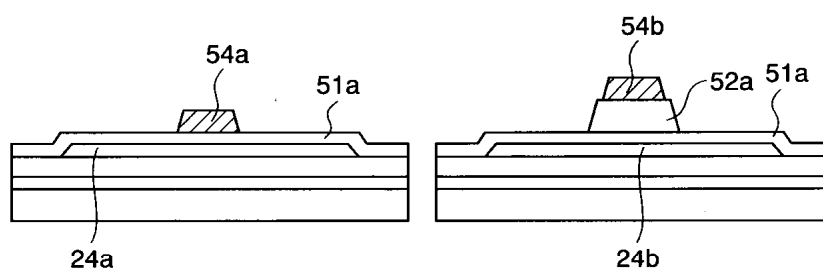
12b



12c

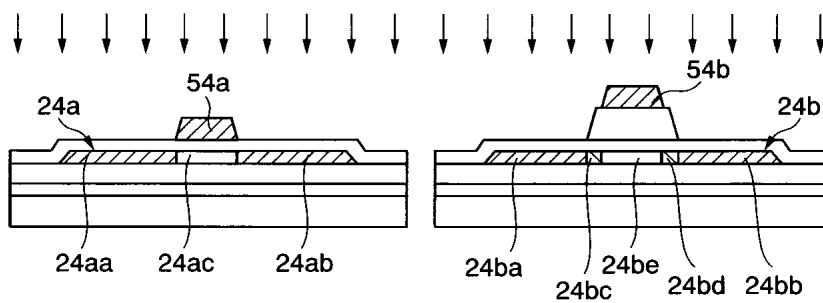


12d

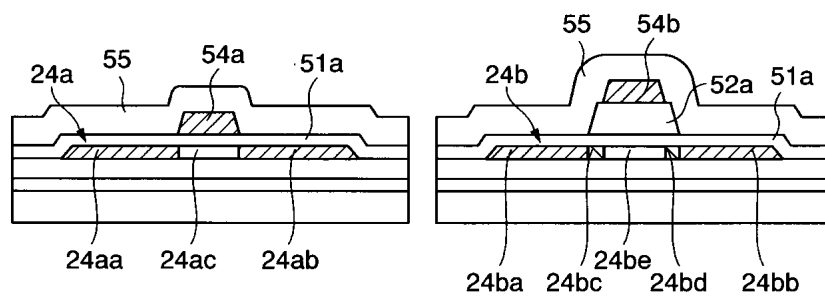


12e

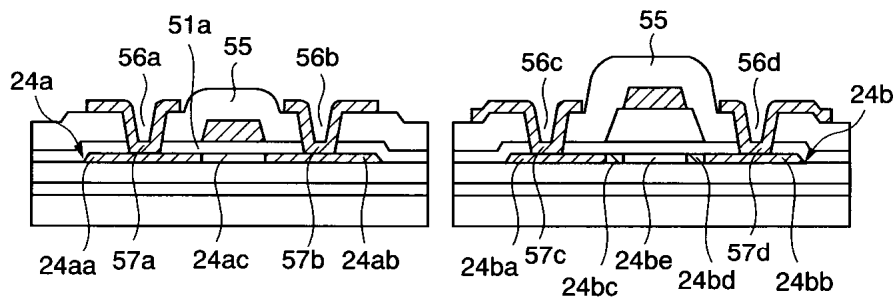
이온 주입



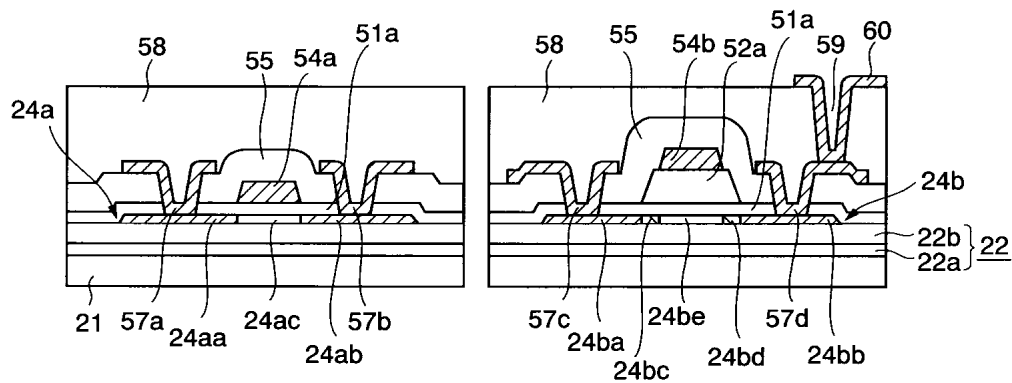
12f



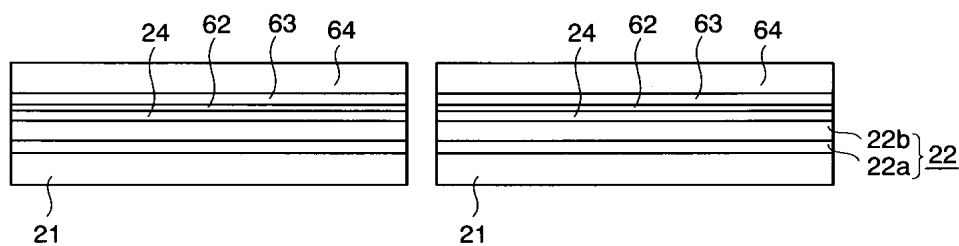
12g



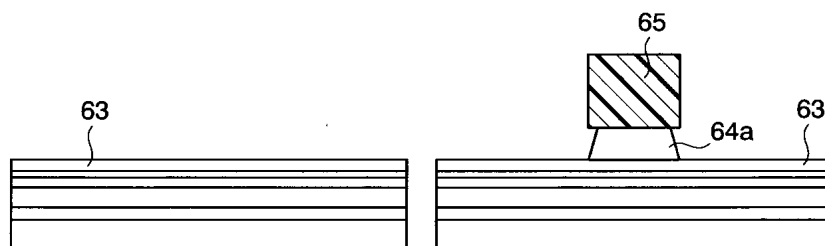
12h



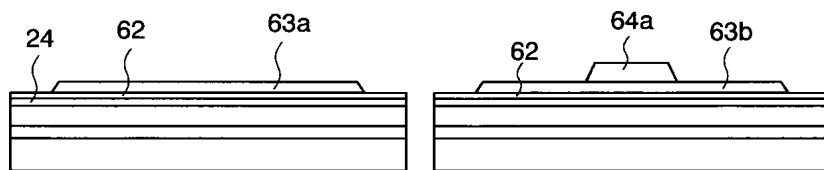
13a



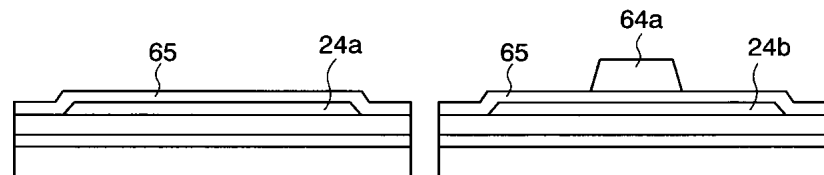
13b



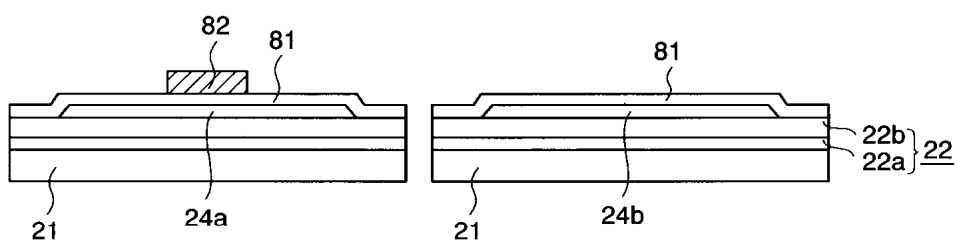
13c



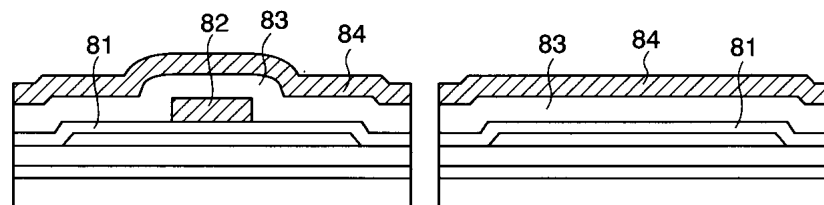
13d



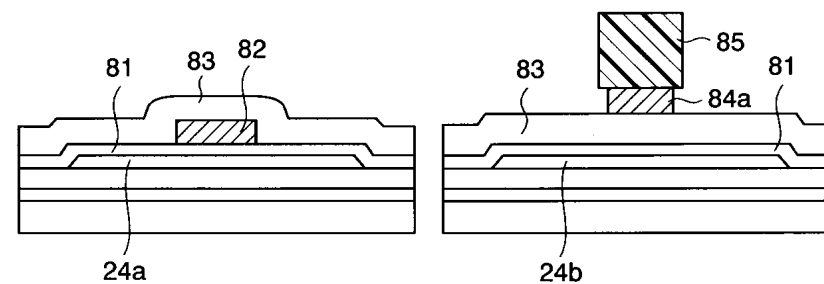
14a



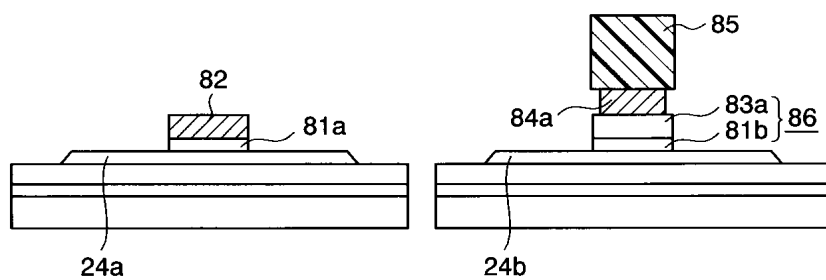
14b



14c

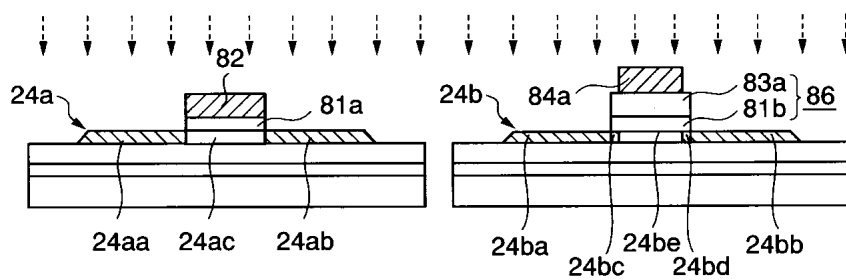


14d

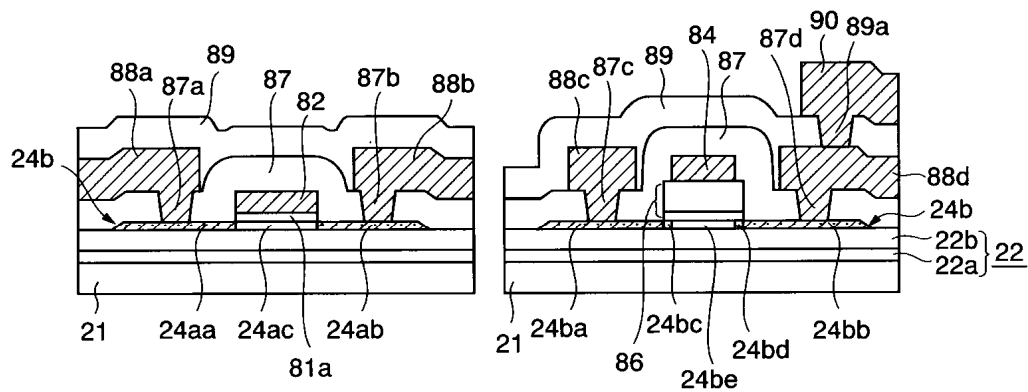


14e

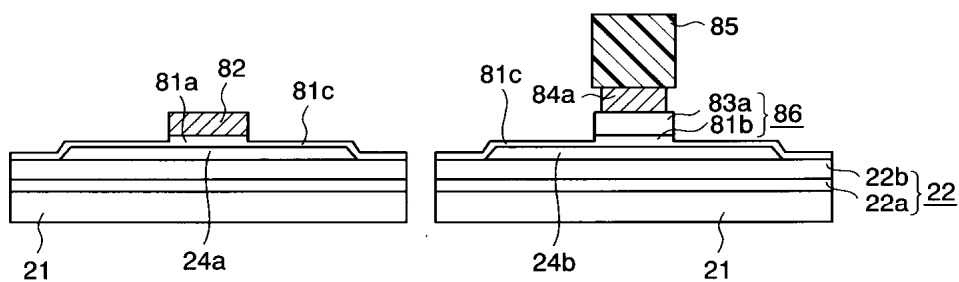
이온 주입

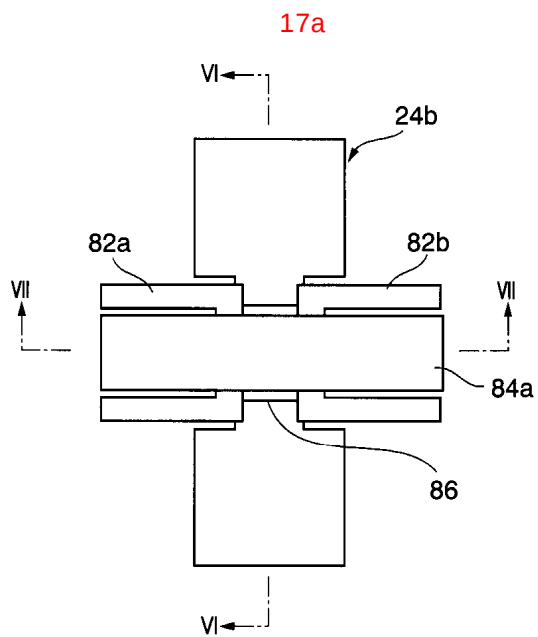
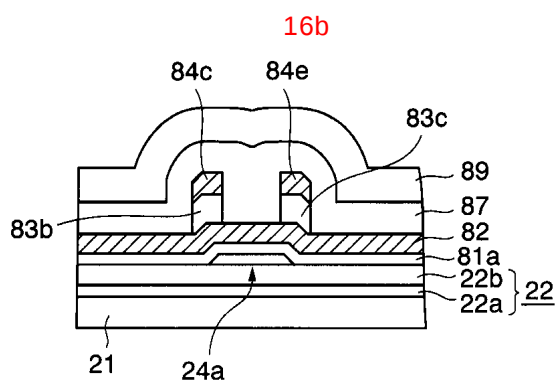
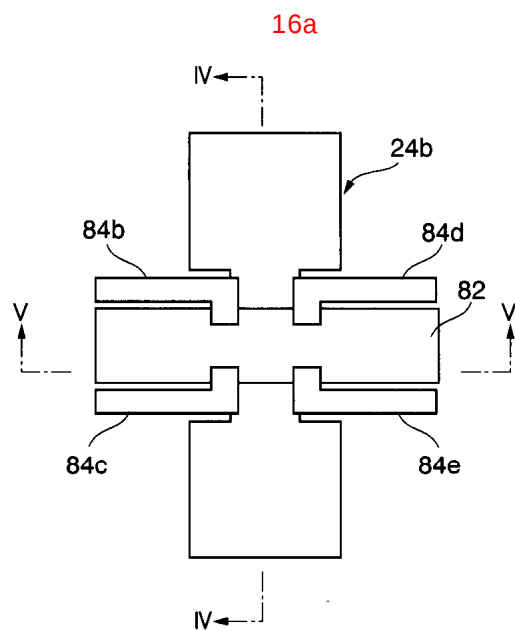


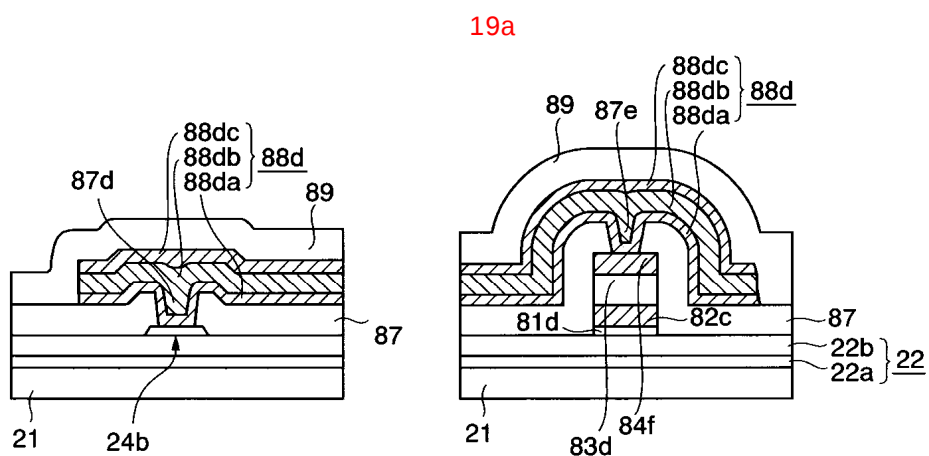
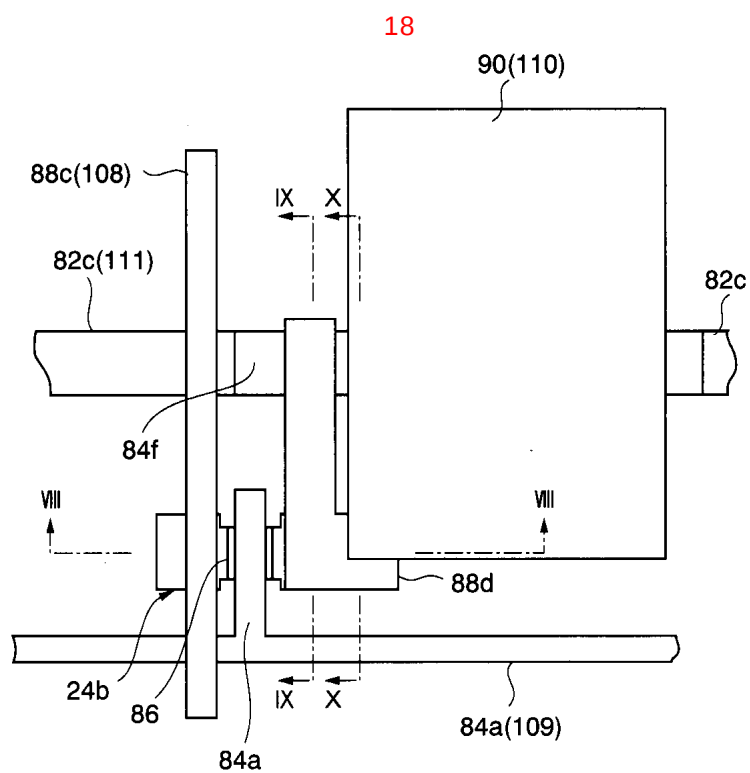
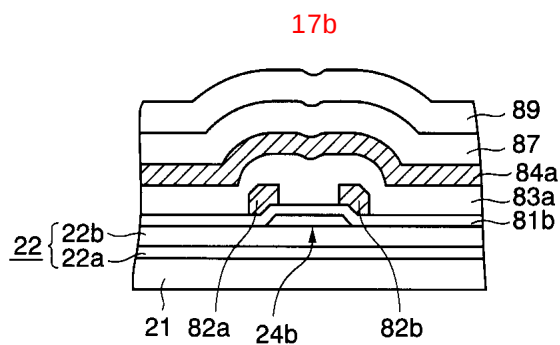
14f



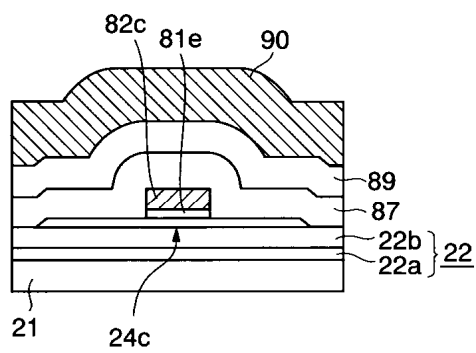
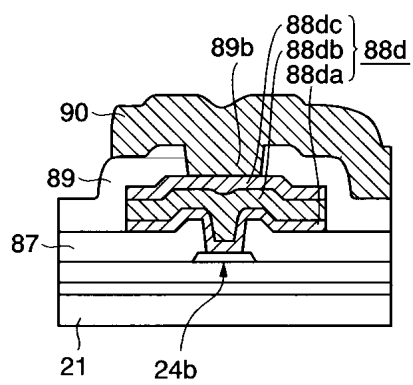
15







21b



专利名称(译)	薄膜晶体管器件，其制造方法和液晶显示器件		
公开(公告)号	KR1020030052995A	公开(公告)日	2003-06-27
申请号	KR1020020080612	申请日	2002-12-17
[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		
[标]发明人	DOI SEIJI 도이세이지 HOTTA KAZUSHIGE 훗따가즈시게 HIRANO TAKUYA 히라노다꾸야 YANAI KENICHI 야나이겐이찌		
发明人	도이세이지 훗따가즈시게 히라노다꾸야 야나이겐이찌		
IPC分类号	G02F1/136 G02F1/1368 G02F1/1362 G09F9/00 G09F9/30 G09F9/35 H01L21/336 H01L21/77 H01L21/8238 H01L21/84 H01L27/08 H01L27/092 H01L27/12 H01L29/423 H01L29/786		
CPC分类号	G02F1/13454 H01L27/1214 H01L27/1237 H01L27/127 H01L27/1288 H01L29/42384		
代理人(译)	Jangsugil Juseongmin		
优先权	2001388306 2001-12-20 JP		
其他公开文献	KR100812492B1		
外部链接	Espacenet		

摘要(译)

薄膜晶体管器件及其制造方法和液晶显示器件技术领域本发明涉及在诸如液晶显示器件的绝缘基板上形成的薄膜晶体管器件，其制造方法和液晶显示器件。该结构包括在覆盖第一岛状半导体膜24a的第一绝缘膜25上形成负性光致抗蚀剂膜26的步骤和从透明基板21的背侧形成负性光致抗蚀剂膜26的步骤曝光和显影26)以在第一岛状半导体膜24a的周边的内表面上形成具有开口的抗蚀剂掩模;在抗蚀剂掩模的开口中蚀刻第一绝缘膜25的步骤在第二绝缘膜上形成导体膜的步骤，图案化导体膜的步骤，以及形成第一栅电极和第二栅电极的步骤。7 指数方面 负性光致抗蚀剂膜，半导体膜，曝光，抗蚀剂图案，蚀刻公开日本专利申请No.2003-0052995

(종래 기술)

