

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl. 7
G02F 1/1343

(11)
(43)

2002 - 0083947
2002 11 04

(21) 10 - 2002 - 0023169
(22) 2002 04 26

(30) JP - P - 2001 - 00130454 2001 04 26 (JP)

(71) 가 가
5 7 1

(72) 5 7 1 가 가

5 7 1 가 가

5 7 1 가 가

가 2080가 가 가

(74)
:

(54)

Nd - (Al - Nd) , 가 0.9%

3

LCD, , (pitting corrosion) , Al

40 LCD TFT

(LCD)

(AI)

2001 - 130454

PC, PDS(Personal Digital Assistants)

가 가 LCD LCD

(paper white display)"

39 40 2000 - 171794 LCD LCD

4) LCD 39 가 (TFT) (223) (22
(233) 가 () () (233)
() (202), () (224)
(204), (204) () (202)
(207) (208)

LCD 40a 40k
, 40a (201) (209)가 1 μ m 5 μ m
, 40b 1 (219)(40mJ
20% 40%) (209) ,
, 1 (219) 5 μ m 50 μ m 가

, 40c 2 (220)(
) 가 , 2 (220)
, 240mJ

40d) , (40%
 80%
 40e , 200 60 ,
 40f , Al (201) 가 200nm가
 40g 40k , TFT가 (210)
 40h , 40g , (228) (210) ,
 (pulling) ()
 40i 40k , , (210) Al
 (210) , () , (s
 pacer) (210) LCD가 .
 (retardation)
 2
 1 , 40d 가 . 가
 LCD가 2000 - 258787 , (Al - Nd)
 history) , 1 % Al - Nd , LCD가 (hillock)
 2000 - 171794 LCD , Al
 (Ta) (端子部) Ta ITO(Indium
 Tin Oxide) 2 . 2
 가 Ta , ITO , ITO
 LCD , TFT
 , Al Ta 가
 , Al ((pitting)) 가 , ITO 가
 , a - Si n⁺ a - Si 가 , TFT 8
 9 가 가
 가, 2000 - 258787 LCD , Al - Nd
 , Al - Nd 0.9 % Nd(4.3 % , Al - Nd
 () . Nd)

(semi) , Al LCD

가 TFT

1

가 ,

Al

Al

2

가 ,

Al

(Ti),

(Cr),

(Ta)

Al

Nd, Ti, Cr

가 Ta

(Nd),

가

2%

0.9 %

Nd

AI , AI

;

가

AI

3

1

2

2

2

V 가

AI

4

가

;

1

;

2

2

,

2

;

;

;

V 가

;

,

,

,

AI

,

,

.

5

,

,

,

;

,

가

,

,

,

;

1

;

2

2

,

,

2

;

;

AI

,

AI

.

6

,

,

;

,

가

,

,

,

;

1

;

2

2

,

,

2

;

;

;

AI

1

가

;

2

2

2

;

AI

AI

1

가

;

2

2

2

;

AI

, 2, 1 2, 1

, 1 2, 1

7,

가, Al

Al

가

8,

가,

Al

가

, Nd, Ti, Cr Ta

Al

가

, Nd, Ti, Cr Ta

가

2%

Nd 0.9 %

LCD

Al

, Al - Nd

, TFT

LCD

가

[1]

1 LCD) C - C

1

LCD TFT (10)

2 1 TFT

3 2 A - A , B - B(4 B - B

TFT (10) (12)

, 1 3 (11)

(10a) (12)

(11)

TFT (14)

(13) , TFT(14) (31)
 (holding) 가 (31)
 (32) , (11), (12) TFT(14) (31)
 1) (32) (31) (1)
 (15)가 (12)
 (16)가 (13) (17)
 , TFT (10) , (17) (20) (33)
 가 (18)가 (15)
 (16) TFT (10) , LCD가
 , (15) (16) 가 T
 FT (10) (2).

2 3 , (20) , (21) 가
 (33) , (20a) (22)가 (31)
 , (22) LCD

(34) TFT (10) (20)
 (20) TFT (10) (23) (in - plane spacer; 35)가
 TFT (36) , (36) (34)
 (20) TFT (10) , 1/4 (37) (38)
 2 (15) (16)
 IC COG(Chip - On - Glass) LCD가

3 , (20) (39) (20) (36)
 , TFT (10) (31) (36) (20)
 (40)

1 1 LCD TFT (10) 4 7a
 4 1 LCD TFT (10) 5a 5d
 1 4 B-B 4 B-B 6e 6h 1
 4 B-B , TFT가 1
 16) (18) 7a 7e (15), ()
 (64) 8a 8f 1 (12)

4 6h , 1 LCD TFT (10) , 가
 (11) (12), TFT(14), (31), (31)
 TFT (10) (20) (36) 가 (31), (31)
 (55) , (41) (11) ,
 (42) (12) , (43) (31) , (46) (13)
 (46) (31) , (31) 가
 , (31) 가 , (31) (11)

(12)

가, 5a 5d , TFT (10) , (41) (10a)
 TFT (44) , TFT (a-Si) (44a) n⁺ a-Si (44)
 (44) (41) , (42) (43) n⁺
 a-Si (44b) (31) ,
 (55)

(55) ,
 (4) , (55) ,
 TFT(14) (54) (55) (31) ,
 (31) (43) (45) (43) ,
 (55) (31) (31)

(convex) , (concave) ,

가

(55)
 (55) 가 , 가 가 ,
 (31), (11) (12) , (31), (11) (12)
 가
 , (55) 가 1.5 μ m 4 μ m가

5a 6h, 7a 7e 8a 8f , (1) (41)
 Si (44b) (42) , (2) (53), a-Si (44a), n⁺ a-
 , (3) (42) (43)
 , (4) (54) (55) , (55)
 (6) (31) (55) , (5) (54) ,
 (31)

(non - alkaline)

0.5mm

(10a)

(Cr)

100nm

300nm

1

(41), (11,), (13,), (46), (15),
 (16), (18) (61), (64) (1, 5a, 7a
 8a). , Cr , Mo, Al Al , 가
 Cr, Mo, Ti

(SiN) 300nm 500nm (53)
 (CVD) , 150nm 500nm (a-Si) 30nm 5
 0nm (n⁺ a-Si) CVD , a-Si (44a) n⁺ a-
 Si (44b) (44) (5b, 7b, 8b).
 , a-Si (44a) TFT(14) , n⁺ a-Si (44b) (42), (43)
 a-Si (44a) .

, Cr 100nm 300nm 2
 (42), (43) (12) , (42)
 (43) , (43)
 n⁺ a-Si (44b) (5c, 7b 8c). n⁺ a-Si (44b) (42)
 (43) n⁺ a-Si (44b) 가
 , Cr 가
 Cr, Mo, Ti , Mo, Al Al
 43) . n⁺ a-Si (44b) , (42) ()
 가 .

, 100nm 300nm CVD (54)
 (5d, 7c 8d).

, 2 μ m 4 μ m (55) (54)
 (55) .
 , 가 (62a) (62b)
 (55) (62c) (positionin
 g)가 (6e).

, (55) (55)
 , (55) . , (55) (, (62c))
 (62b)) (55) (sharp step) (,)
 , (55) (55) 가
 , 가 (55) 가
 , 1 가 .

, (55) , 가 , JSR() " PC403"
 , , 가 .
 (55) 가 , (1) (55) , (2)
 (55) , (3) , (4) , (5) (55)
 , (6) 가 , (1)
 (55) , (2) , (3) .
 가 , (printing) (6f).

200 (55) 가 (55) 80
 (55) , 200 250 (burning)
 (15,), (43) (54), (53) (12) , (54),
 (53) (18) (61) (64) (56, 62 65)
 (6g, 7d 8e). (54) a - Si (44a) TFT(14)

, 100nm 300nm Al - Nd , TFT
 (6h, 7e 8f). (31), (63) (66) , Al
 (63) () , Al - Nd 0.9 % Nd , Al
 Al 가 , Nd , Ti, Cr Ta Nd, Ti, Cr Ta
 가 , 2 % (Mo
). (31) , (66) , Al Cr (55) A

2 ,
 가 2 (55)

3 , (34) 40nm 80nm TFT (10)
 (21) ITO , (34) 200 230 , (20)
 가 , (22)가 (20) , 40nm 80nm (20)
 (34) (34) 200 230 (23) (20) TFT ()
 10) (in - plane spacer; 35) , TFT (10) , ()
 34) (36) (UV) , (36) TFT (10) (20)
 (20) , 1/4 (37) (38) LCD가 (24)

IC COG , (15), (16) (18)
 LCD가 , (63) COG
 () .

[2]

2 TFT (10) , , 1 (1 3)
 , 2 TFT 1 , (22)가 (20)
 TFT(14)

2 LCD TFT (10) 9 12
 , 9 2 LCD TFT (10) . 10a
 10d LCD TFT (10) 9 B-B
 11e 11f LCD TFT (10) 9 B-B
 . 12a 12e 2 LCD TFT (10)
 . 2 , TFT가 1
 가 . 7a 7e 8a 8e 2

11f , 1 TFT가 TFT
 (10) (1) 10a 11f, 7a 7e 8a 8e , (2) 1
 (41) , (53) a-Si (44a) , (82)
 (81) (12) , (3) 2 (82)
 (55) , (55) , (4) 1 (81)
 2 (82) , (5) V 가(valence) , (4)
 2), (43) (31) ,

10a, 7a 8a , , Cr 가 100nm 300nm
 가 0.5nm (10a)
 가 300nm 500nm (53) a-Si CVD ,
 (44a) (41) , (41), (53) a-Si
 (53) a-Si (44a) , () , () , (46), (15),
 (16), (18) (61), (64) .

12 (91) (10a),
 (53) a-Si (44a) 1 (92) . , 1
 가 , (91)가 (41) , 가 (91)가
 (11;) , (13;) , (46), (15), (16), (18)
 (61;) , (64;) . 가
 , , , (12a).

a-Si (44a), (53) 1 (92) (91)
 . 가 가 , (53) 1 (92)
 가 가 (RIE) (12b).

가 (O₂) (ashing) (91) 가 a-Si (91) 가 (12c). (12d).

(91) (41), (53) a-Si (44a) 3 (11;), (13;), (46), (15), (16), (18) (61;), (64;) (12e).

10 가 100nm 300nm 1 (81) CVD 가 100nm 300nm Cr 2 (10b, 7b 8c). (12)

가 100nm 200nm 2 (82) CVD (10c, 7c 8d). 1 (55) 가 (10d, 7c 8d).

a-Si (44a), a-Si (44a) (12), 1 (81) (12) (82), (15), (16), (18) (61), (64) 2 (82) 1 (81) (45, 71, 62 65) a-Si (44a) (11e, 7d 8e). 1 (81) 2 (82)

TFT(14)

(P) V 가 (PH₃) , n⁺ a-Si , a-Si (44a) (45 71) (44d) (44s)

, Cr Mo 가 50nm Al-Nd (42), (43), (31), (66 83) (63) TFT (10) (11f, 7e 8f).

, Al (31) (66) , Al (44d) (44c) n⁺ a-Si , Al , 2 (82) 가 (55) 2 (82) 가 1 가 (82) LCD

1 , LCD LCD가 .

[3]

3 TFT , , 1 (1 3)

, 3 LCD TFT (10) 13 16

13 3 LCD TFT (10)
 14a 14e LCD TFT (10) 13 B-B
 15f 15g LCD TFT (10) 13 B-B
 16a 16e 14b 14c

3 , 가 TFT가 1
 가 7a 7e 8a 8f

3 , 15g , TFT가 , ,
 1 .

TFT , 14a 15g , (1) (41)
 (41) , (2) (53), a-Si (44a), n⁺ a-Si
 (44b), (42) (43) , n⁺ a-Si (44
 b) a-Si (44a) , (3) (54) (55) ,
 (5) (31) (55) , (4) (54) ,
 (31) 5

14a 7a , 가 0.5nm 1 (92)
 (10a) , 1 (92)
 (41), (11;), (13;), (46), (15), (16), (
 18) (61), (64;) .

14b 14c 7b , 가 300nm 500nm
 (53), a-Si a-Si , n⁺ a-Si n⁺ a-Si CVD
 , Cr 가 100nm 300nm 2 (82)
 (42), (43) (12) , 가 a-Si (44a) n⁺
 a-Si (44b)

16 (53) a-Si
 (44a), n⁺ a-Si (44b) 2 (93) , 1 (55)

가 (91)가 (42) (43)
 가 (91) (42) (43) (12)

(91)가

(91) 2 (93) (16b).

(O₂) (91) , 가 가
 (16c). , (91) N- -2- (NMP)
 가 (91),
 (42) (43) , n⁺ a-Si (44b) a-Si (44a) . n⁺
 a-Si (44b) a-Si (44a) RIE가 (16d).

(91) , (42) (43)
 (42) (43) n⁺ a-Si (44b) a-Si (44a) (16e) .
 가, (42) (43) (16b)

14, (54) (14d 7c). 가 100nm 300nm CVD

1, (55) (55)
 (14e 7c).

(54), (15), (16), (18) (53) (12)
 (54) (53) (61), (64;)
 (15f 7d). (56, 62 65)

가 100nm 300nm Al - Nd (43), (53) (12)
 (31) (63;) TFT 가 (15g 7e).
 (31) (66) 1

3 (12) (64) , n⁺ a - Si (44b) a - Si (44a)
 (12) (12) , 8a 8f

1, LCD LCD가 .

[4]

4 TFT , , 1 (1 3)

4 LCD TFT 17 20 .
 17 4 LCD TFT (10) 18a
 18e LCD TFT (10) 17 B - B
 19f 19g LCD TFT (10) 17 B - B
 20a 20e 18b 18c

4 가 TFT가 1
 가 7a 7e 8a 8f

4 19g , TFT가 4 3
 , 3 TFT , 18a
 19g , (1) (41) (41)
 , (2) (53), a - Si (44a), n⁺ a - Si (44b), (42) (43)
 , n⁺ a - Si (44b) a - Si (44a) , (42) (43)
 () , (3) (54) (55) ,
 , (55) , (4) (54) , (5)
 (31) (31)

18a 7b 가 0.5nm 1 (92)
 (10a) 1 (92)
 (41), (11;), (13;), (46), (15), (16), (
 18) (61), (64;) .

18b 18c 7b 가 300nm 500nm
 (53), a-Si 가 150nm 300nm a-Si , n⁺ a-Si 가
 30nm 50nm n⁺ a-Si CVD , Cr 가 100nm 가
 300nm 2 (82) , (12), (43)
 (42) , a-Si (44a) n⁺ a-Si (44b)
 (44) 2 (93) (44) ,
 가 2 (93) n⁺ a-Si (44b) , (42) (43)

20 (53) a-Si
 (44a), n⁺ a-Si (44b) 2 (93) , 1 (55)
 가 (91)가 (42), (43) , 가
 (91) .

(91) 2 (93), n⁺ a-Si (44b) a-Si (44a)
 (20b). (44) , n⁺ a-Si (44b) a-Si (44a)
 RIE가 , (O₂) (91)
 , 가 가 (20c).
 가 (91) 2 (93)
 (42) (43) (20d).

(91) (42) (43)
 (42) (91) (43) n⁺ a-Si (44b) a-Si (44a) (20e) .
 가, (20d) (42) (43)

18 가 100nm 300nm CVD
 (54) (18d 7c).
 1 (55) (55)
 (18e 7c).

(43), (53) (12)
 (54), (15), (16), (18) (61), (64;)
 (54) (53) (56, 62 65)
 (19f 7d) .

가 100nm 300nm Al - Nd ,
 (31), (63) () TFT (19g
 7e). (31) (66) 1

4 (12) (64) , n⁺ a-Si (44b) a-Si (44a)
 (12) (12) 8a 8f

, 1 LCD LCD가
 , LCD , 가

[5]

5 LCD 21 23i . 21 5
 LCD TFT (10) . 22a 22f
 LCD TFT 21 B-B . 23g 2
 3i LCD TFT 21 B-B . 1
 . 5 TFT (10) ,
 (1 3) , 5 LCD , (31) ,
 (101) TFT (10) () TFT (10) ()
 가 1 .
 (31) TFT (10)
 (101), (36,) 가
 가

5 , 1 가 5 LC
 D TFT 1 TFT (10) 가 . 7a 7e 8a 8f

TFT 22a 23i 7 ,
 (1) (41) , (2) (53), a-S
 i (44a), n⁺ a-Si (44b), (42) (43) , (42) (42)
 (43) , (3) (42) (43)
 (42) (43) , (4) (54) (55)
 (55) , (5) (101)
 (101) , (6) (54)
 , (7) (31) (31)

, 1 , TFT가 (54) (55)
 TFT (22a 22f, 7a 7c, 8a 8d).

, ITO 40nm 100nm
 (101) (23g, 7c 8d).

, 1 , (56, 62 65) (54)
 (23h, 7d 8e).

, Cr Mo 가 50nm 200nm , 100nm 300nm

Al - Nd
 (31), (63) (66) TFT (10) 가 (23i,
 7e 8f). 5 (31) (66) , Al ,
 , ITO (101) Al Al .
 , Al .

, 1 , LCD LCD가 .

[6]

6 LCD 24 26g . 24 6
 LCD TFT (10) (10) 24 B - B . 25a 25d
 e LCD TFT (10) LCD TFT (10) 24 B - B . 26
 (1 3) TFT (10) , 6 , 1 가
 가 . 7a 7e 8a 8f LCD TFT 1 TFT (10)
 6

TFT 25a 26g, 7 8 6
 (1) (41) , (53) a - Si (44a)
 (82) (2) 1 (81) (12) , (3) 2
 (101) (55) , (55) , (5) 1 (81) 2 (82)
 (43) (31) , (6) V 가(valence) , (42),
 ,

, 1 , TFT가 2 (82) (55)
 TFT (25a 25d, 7a 7c, 8a 8d).

, ITO 40nm 100nm (101) (26e, 7c 8d).

, 1 , (56, 62 65) 1 (81)
 2 (82) (26f, 7d 8e).

, Cr Mo 가 50nm 200nm , 100nm 300nm
 Al - Nd (31), (63) (66 83) TFT (10) 가 ((23i,
 26g, 7e 8f). , 5 Al 가 (66 83) (31)
 1 Al 가 .

, 1 , LCD LCD가 .

[7]

7 LCD TFT (10) 27 29h . 27 7
 LCD TFT (10) 27 B - B . 28a 28e
 f LCD 29h LCD TFT (10) LCD TFT (10) 27 B - B . 29
 (1 3) 7 TFT (10) , 7 , 1 가 5
 가 . 7a 7e LCD TFT 3 TFT (10)
 TFT (10) 28a 29h 6 ,
 (1) (41) (41) , (2)
 (53), a - Si (44a), n + a - Si (44b), (42) (43) ,
 , a - Si (44a) n + a - Si (44b) , (3)
 (54) (55) , (55) , (4)
 (101) (101) , (5)
 (54) , (6) (31) (31)
 , 3 , TFT가 (54) (55)
 TFT (28a 28e, 7a 7c).
 , ITO 40nm 100nm
 (101) (29f 7c).
 , 3 , (56, 62 65,)
 (54) (29g 7d).
 , Cr Mo 가 50nm 200nm , 100nm 300nm
 Al - Nd (31), (63) () TFT (10) 가 ()
 29h 7e).
 7 , 5 (66 83) (31)
 1 Al 가 7 (12) (64) ,
 , n+ a - Si (44b) a - Si (44a) (12) (12)
 8a 8f .
 , 1 , LCD LCD가 .

[8]

8 LCD TFT (10) 30 32h . 30 8
 LCD TFT (10) 30 B - B . 31a 31e
 f LCD 32h LCD TFT (10) 30 B - B . 32

TFT (10) , , 5
 (1 3) , 8 , 1 가
 LCD TFT 8 1 TFT (10)
 가 . 7a 7e 8a 8f 8 .

 TFT (10) 31a 32h 6 , ,
 (1) (41) , (2) (53),
 a - Si (44a), n⁺ a - Si (44b), (42) (43) , (4)
 2) (43) , n⁺ a - Si (44b), a - Si (44a) ,
 (42) (43) () , (3) (54) (55)
 (55) , (4) (101)
 , (6) (101) , (5) (54)
 , (31) (31) .

 , 4 , TFT가 (54) (55)
 TFT (31a 31e, 7a 7c).

 , ITO 40nm 100nm
 (101) (32f 7c).

 , 4 , (56, 62 65)(62 65)
 (54) (32g 7d).

 , Cr Mo 가 50nm 200nm , 100nm 300nm
 Al - Nd (31), (63) (66,) TFT (10) 가
 (32h 7e).

 8 , 5 (66 83) (31)
 1 Al 가 . 8 (12) (64) ,
 , n⁺ a - Si (44b) a - Si (44a) (12) (12)
 8a 8f .

 , 1 , LCD LCD가 .

 , LCD LCD , , 1 4 ,
 ITO , 가 , Al ITO Al ,
 Al 가 , 5 8 , ITO

 , (55) 가
 , 33 36 , 1 (111) 2
 (112) .

33 1 (111) 2 (112) 2
 TFT (, B - B) . 34 1 (111)
 2 (112) 3 4 TFT
 (, B - B) . 35 1 (111)
 2 (112) 6 TFT (,
 B - B TFT) . 36 1 (111) 2 (11
 2) B - B 7 8 TFT (,
 B - B TFT) .

1 (111) . 1 (111) , 가
 , (1) , (2)
 1 (111) , (3) , (4)
 (5) , (6)
 , (1) 1 (111) , (2) , (3) ,

1 (111)
 가
 , 0.3 μ m 1.5 μ m
 (burning) 200 250 2 (112)
 , (45,) (43) (54) (56,)

JSR , 1 (111) 2 (112) , 가
 " PC403" , 1 (111) 2 (112)
 , 가

가, (55) 2 (112) , (53)
 (54) 1 (81) 2 (82) 가
 , (55) 2 (112) , (53) (54),
 1 (81) 2 (82) ,
 가

1) (12) , 2 6 (15), (16) (18) , (11)
 (61) (62) (61) (63)
 , 2 6 (82) , (61) (11) , (6

(53) , (12) , (61)

Al 37 (pure) (Al)
 I - Nd(0.9 %) , Al - Ti(2 %) , Al - Cr(2 %) , Al - Ta(2 %) , Al - Nb(2 %) , Al, A
 85% , Al - Nb 85
 1000 , Al - Cr Al - Nd
 200 (,)
 , Al - Cr Al - Nd
 , Al - Ti Al - Ta

38 Al - Nd Al - Ti
 Al - Nd(0.9 %) () , Al - Nd(0.9 %) () , Al - Ti(2 %)
 () , Al - Ti(2 %) ()

Al - Nd , 85 85% 2000
 10 μ m 70 μ m , Al - Nd

Al (Al(OH)₃) (Al₂O₃)

, Nd, Ti, Cr Ta Al Nd가 Al 가 ,
 0.9 % Nd Al 가 ,
 2 %

Al LCD LCD , Al, Nd, Ti, Cr Ta
 0.9 % Nd , 2 %
 Al Nd, Al Ti, Al Cr, Al Ta ,
 TFT

T가 , TFT , TFT가 (forward) TF
 - Si)TFT가 , TFT , MIM(Metal Insulator Metal) (p
 가, , , , ()
 LCD)

가 , Al - Nd , TFT

(57)

1.

가 ,

Al Al

2.

1 (Ta) , Al , Nd, Ti, Cr 가 Ta (Nd), (Ti), (Cr),

3.

2 가 2%

4.

3 , 0.9 % Nd

5.

1 ,

6.

1 , ;

;

;

,

;

;

,
Al , Al ,
Al

7.

1 , , ;

가 , ,
; 1
;

2 2 ; 2 ,

, ;

, Al , Al ,

8.

6 , 1 2 , 1 .

9.

가 ,

, Al

10.

9 , Al , (Nd), (Ti), (Cr),
(Ta) , Nd, Ti, Cr Ta

11.

10 , 가 2%

12.

11 , Nd 0.9 % .

13.

9 , .

14.

9 , , ;

;

, ;

, , , ;

;

, , , AI .

15.

9 , , ;

, 가 , ;

1

;

2

2

2

;

;

, ;

AI

16.

14

, 1 2 1

17.

가

;

;

1

;

2

2

2

;

;

V 가

;

AI

18.

17

19.

17

, 1 2 , 1
2

20.

17

, 1 2 , 1

21.

, 가 ,
 ;
 ;
 1 ;
 2 ;
 2 , , 2
 ;
 ;
 ;
 V 가
 ;
 , , , ,
 , AI , , ,

22.

21 , ,

23.

21 , ,

24.

21 , 1 2 , 1
2 ,

25.

21 , 1 2 , 1

26.

, , ;

, , , ,

가 , ;

1

;

2

2

2

,

, ;

;

AI

,

AI

.

27.

25

,

,

.

28.

25

,

,

.

29.

25

2

1

2

,

1

,

.

30.

25

,

1

2

, 1

.

31.

,

;

,

가

,

,

;

1

;

2

2

2

,

,

;

;

;

Al

32.

31 ,

33.

31 ,

34.

31 , 1 2 , 1
2

35.

31 , 1 2 , 1

36.

가 ,

Al

Al

37.

36 , Al 가 , Nd, Ti, Cr Ta ,
Nd, Ti, Cr Ta

38.

37 , 가 2%

39.

37 , Nd 0.9 % .

40.

가 , ,

Al .

41.

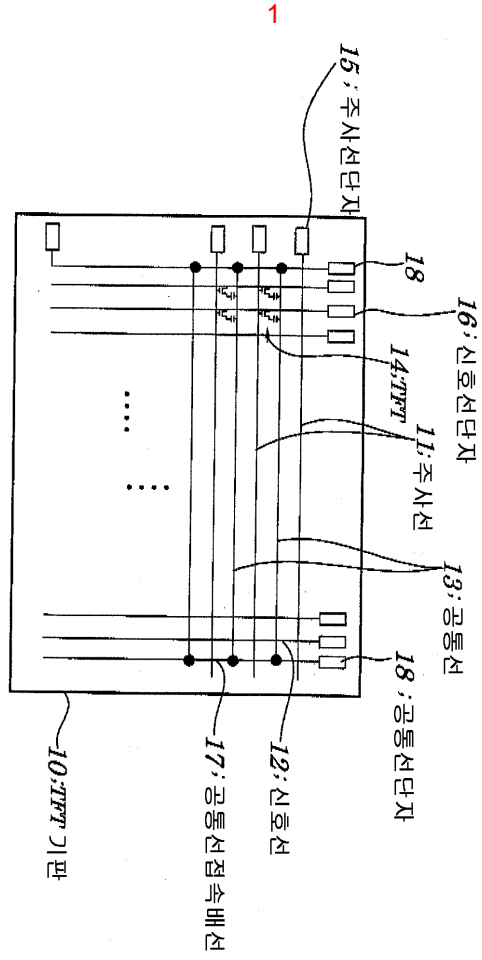
40 , Al 가 , Nd, Ti, Cr Ta ,
Nd, Ti, Cr Ta .

42.

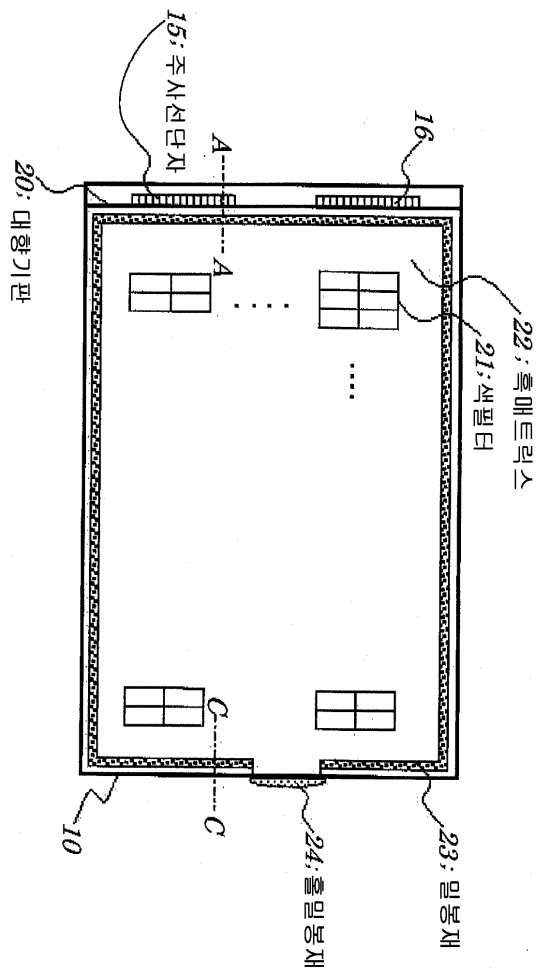
41 , 가 2% .

43.

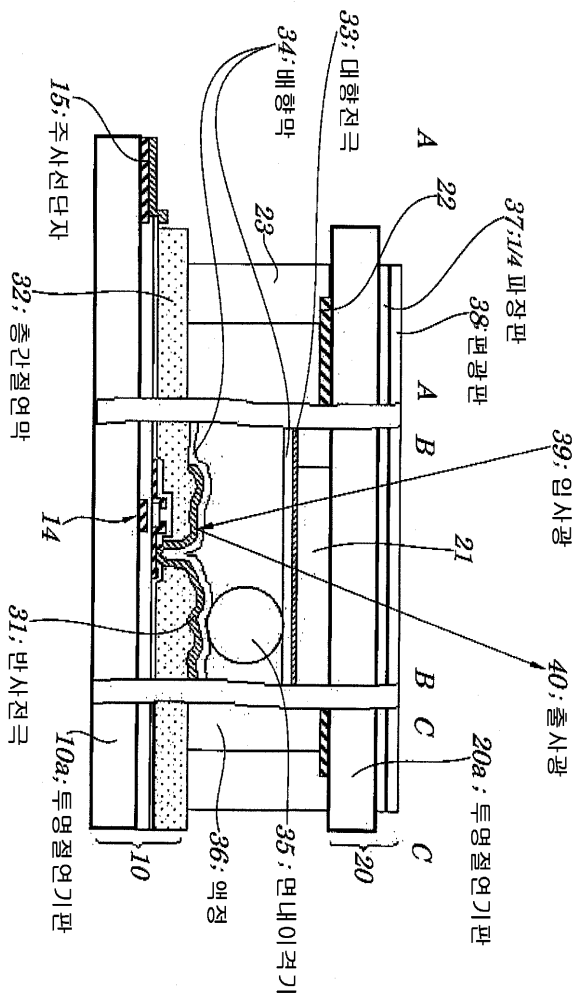
41 , Nd 0.9 % .



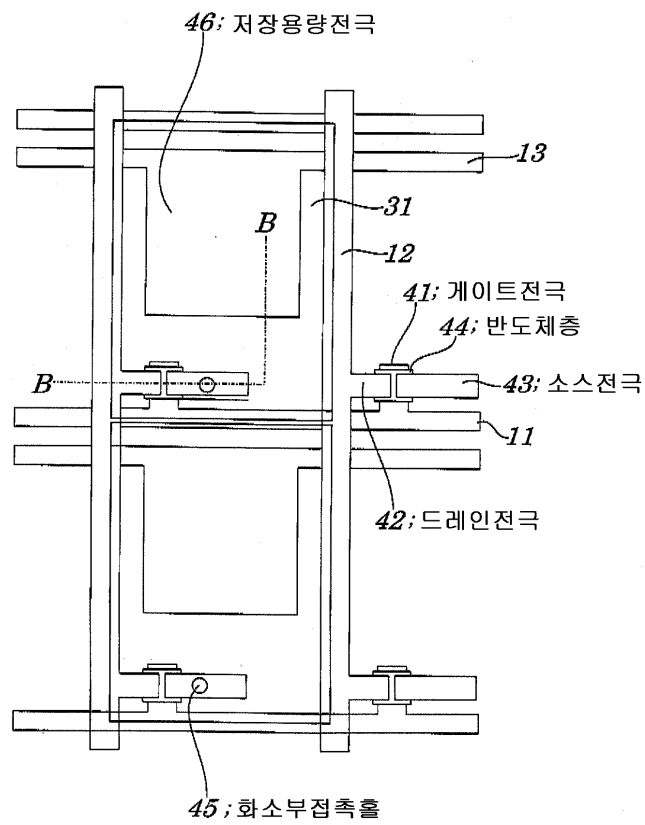
2



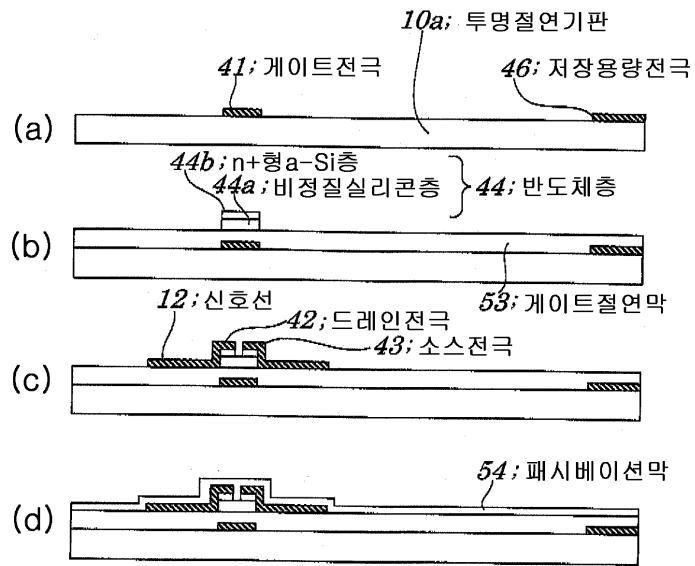
3



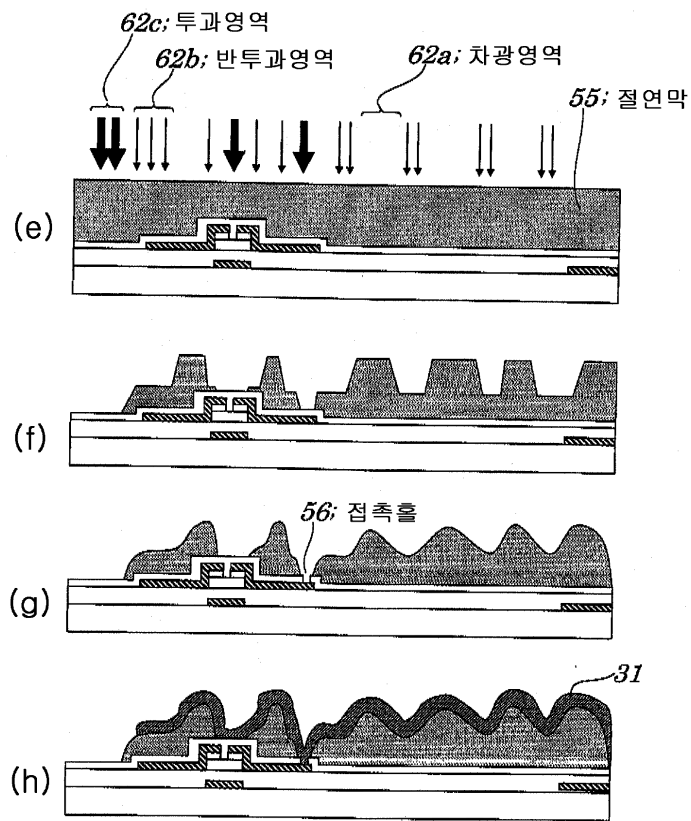
4



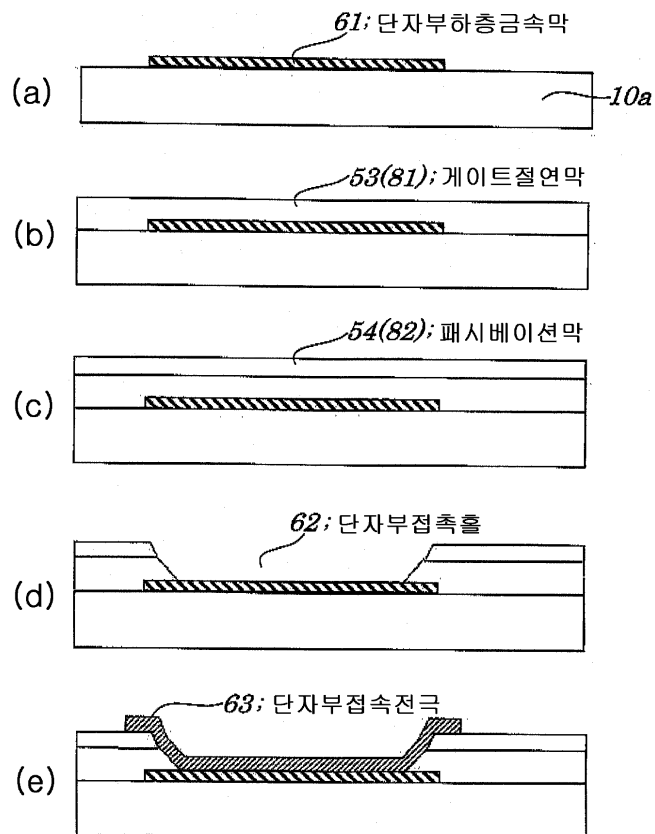
5

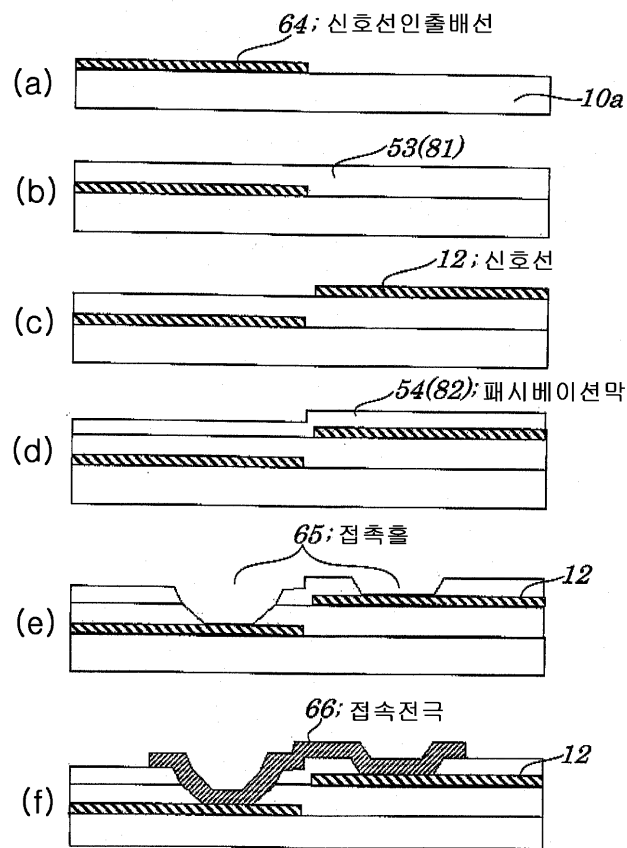


6

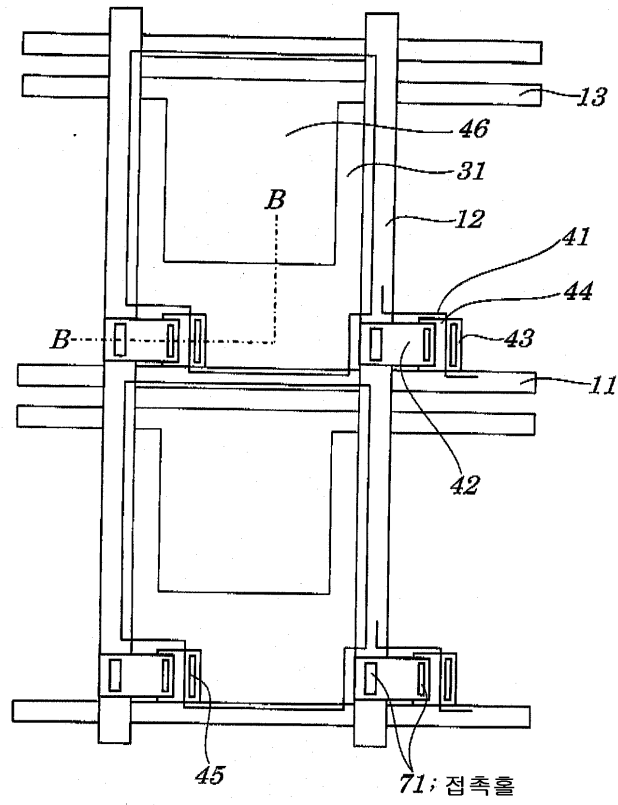


7

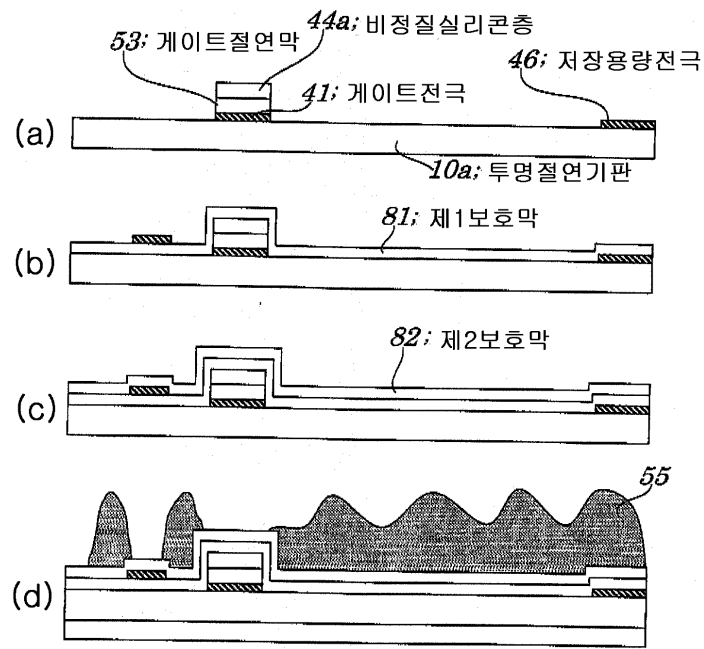




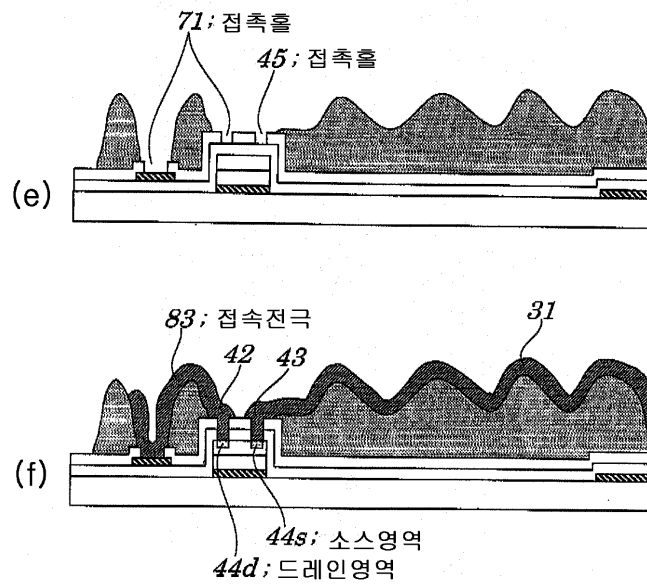
9

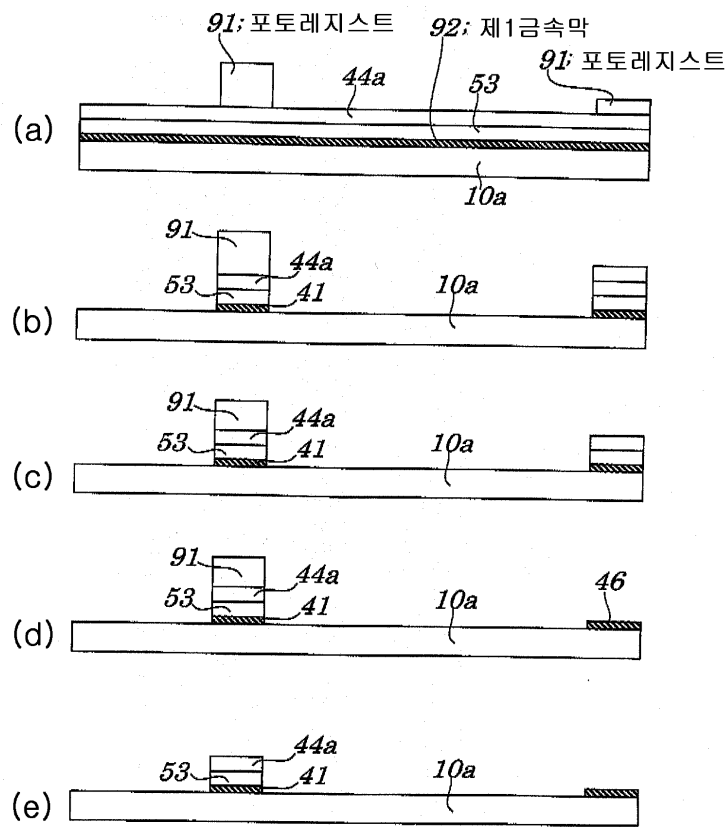


10

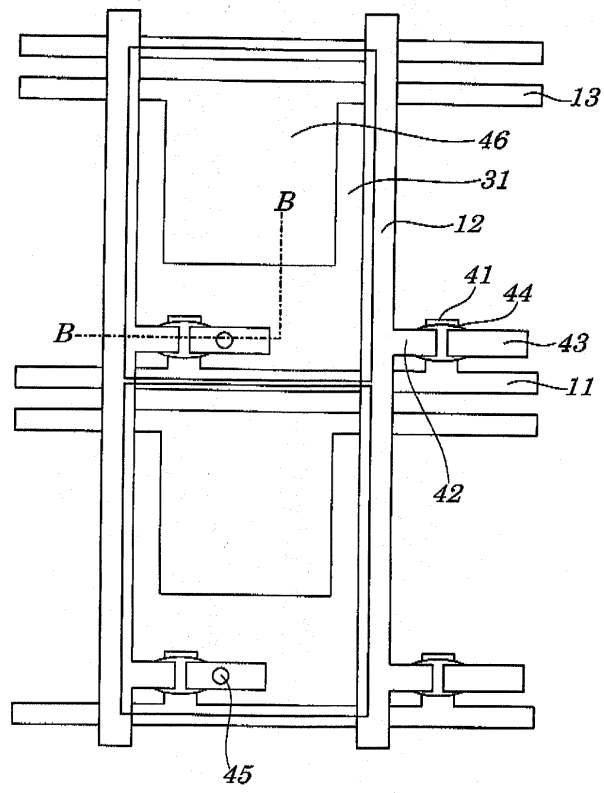


11

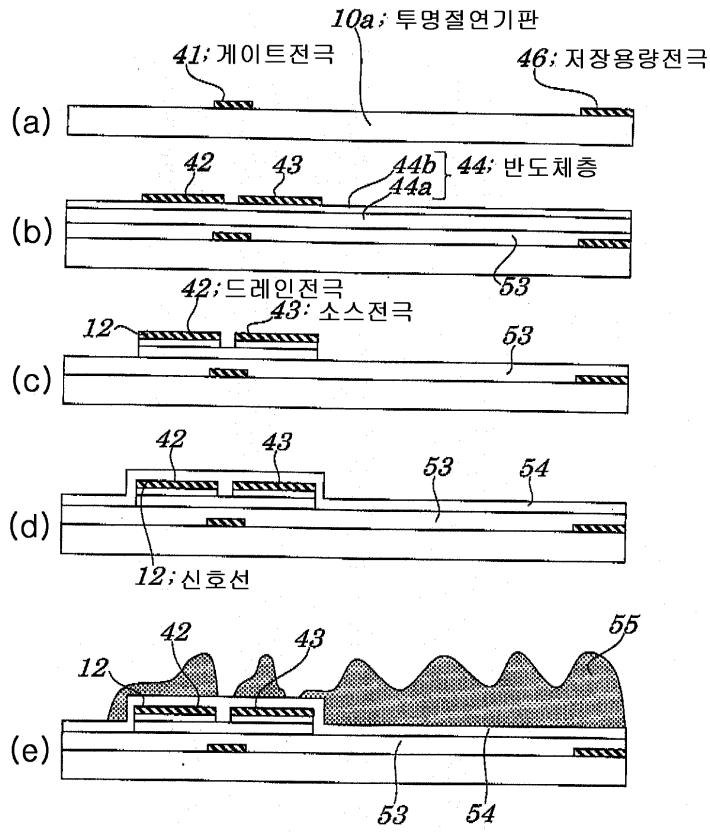




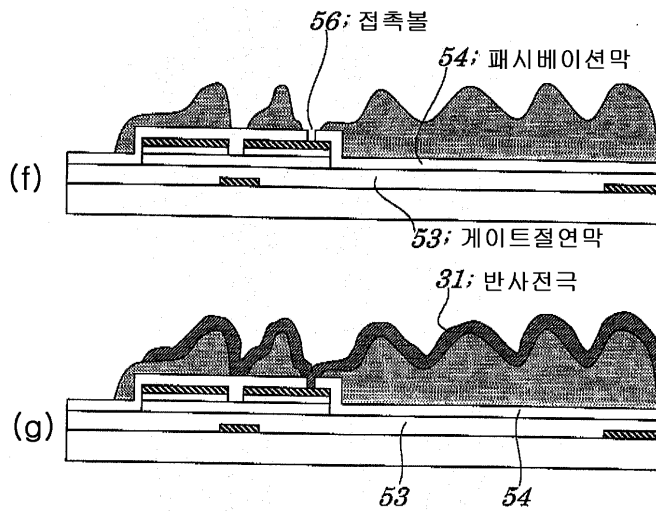
13



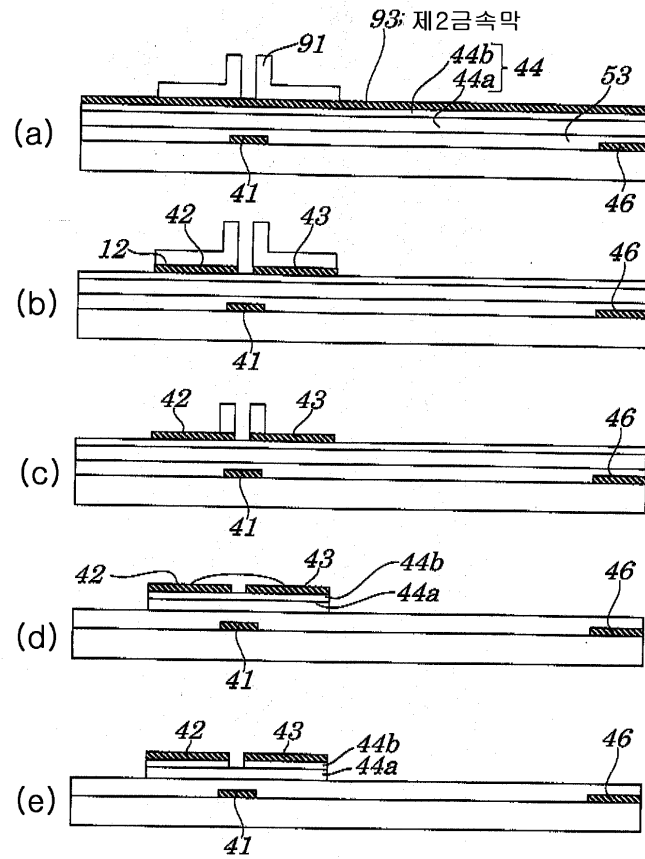
14



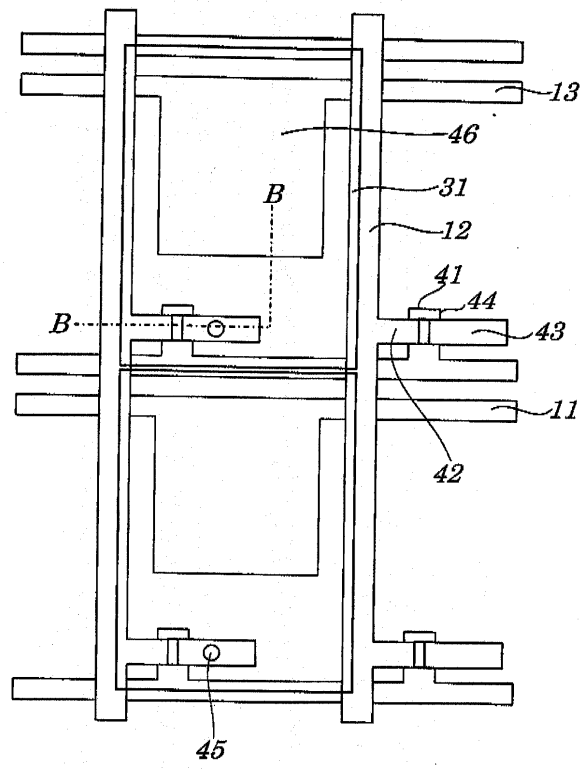
15



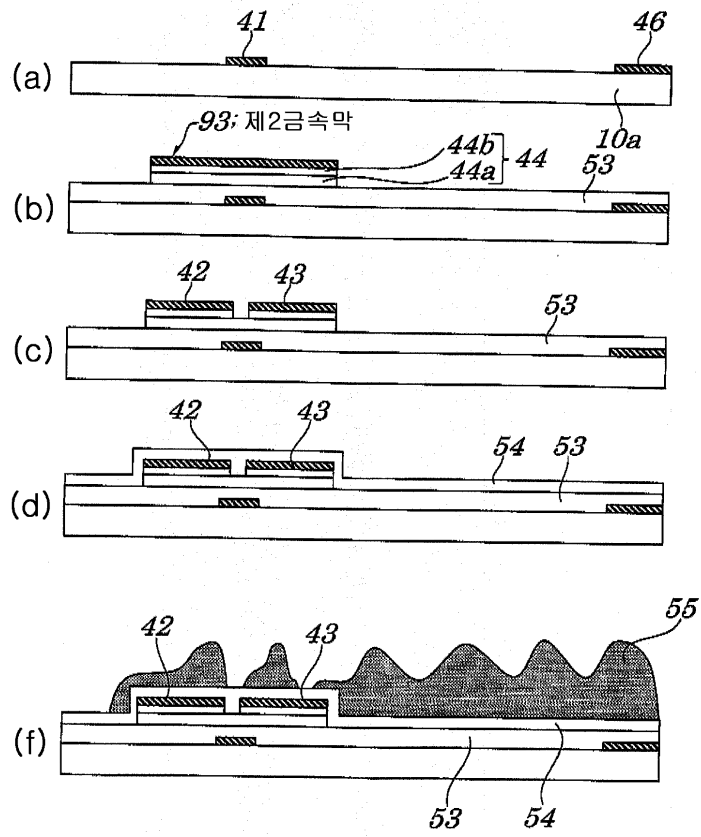
16



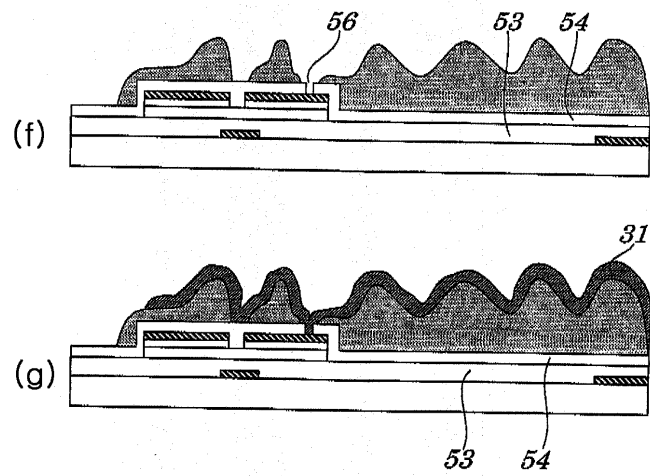
17



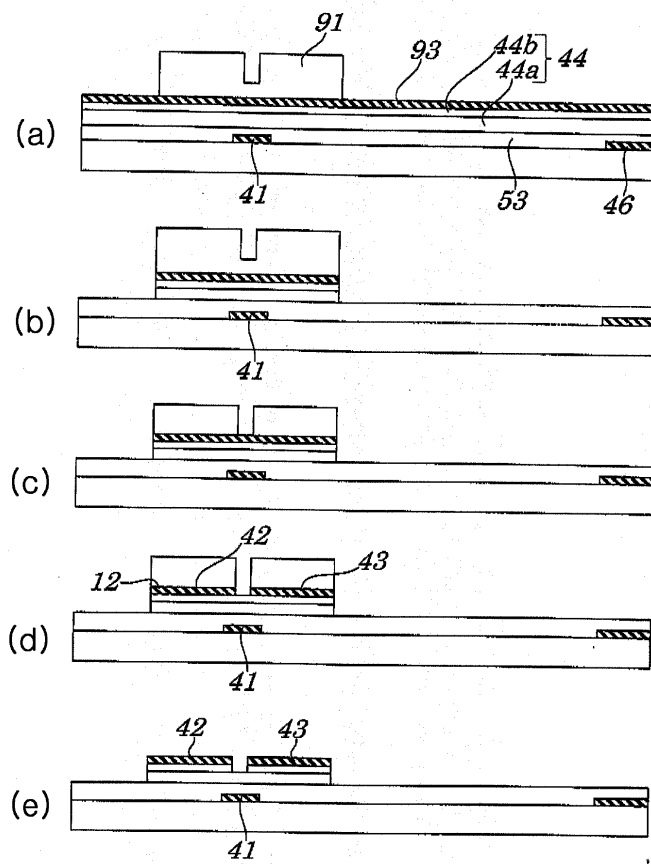
18



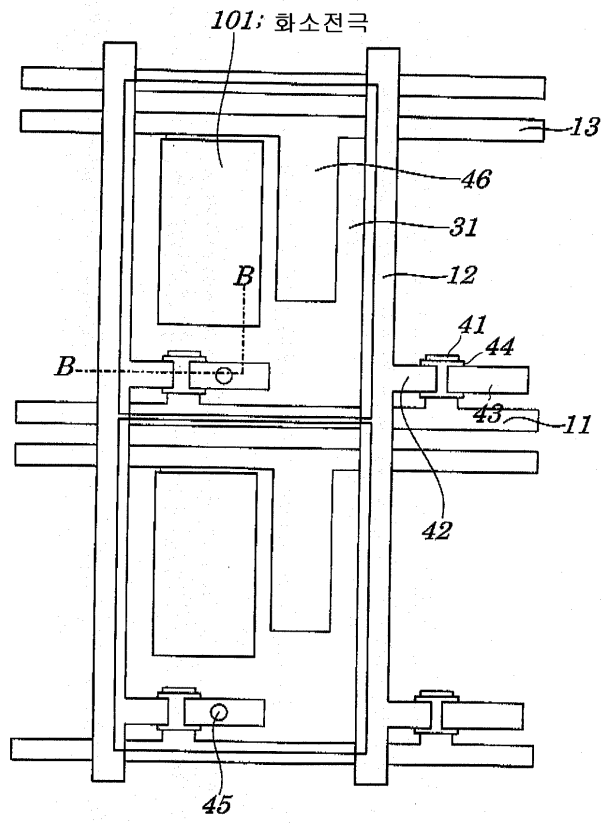
19

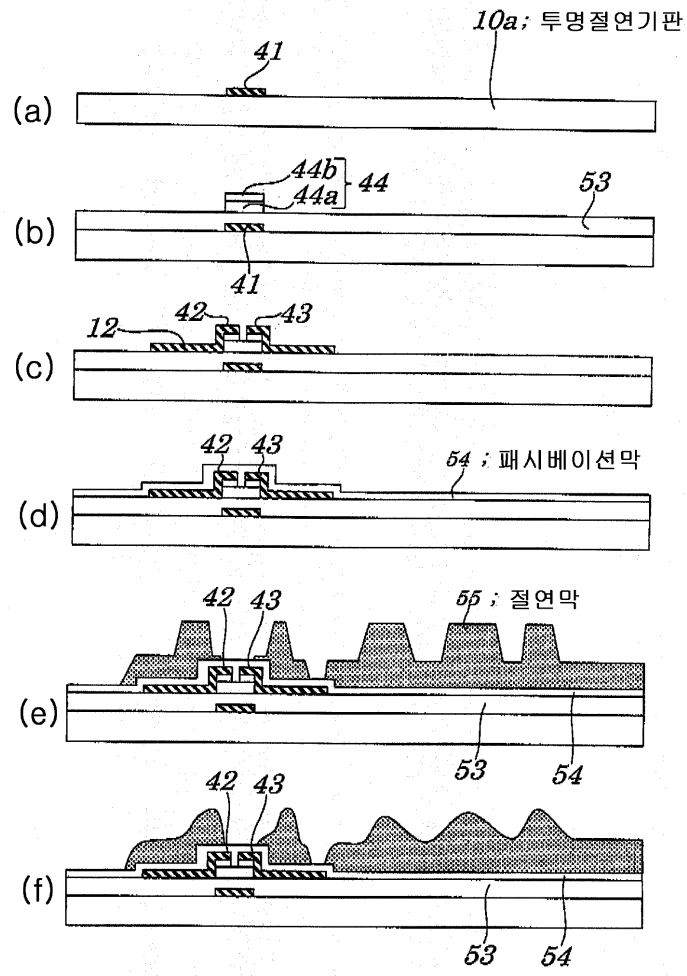


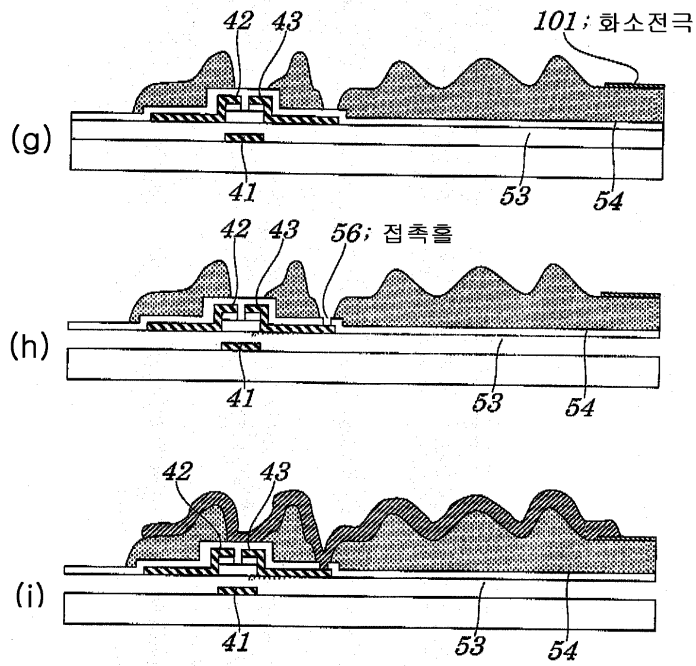
20



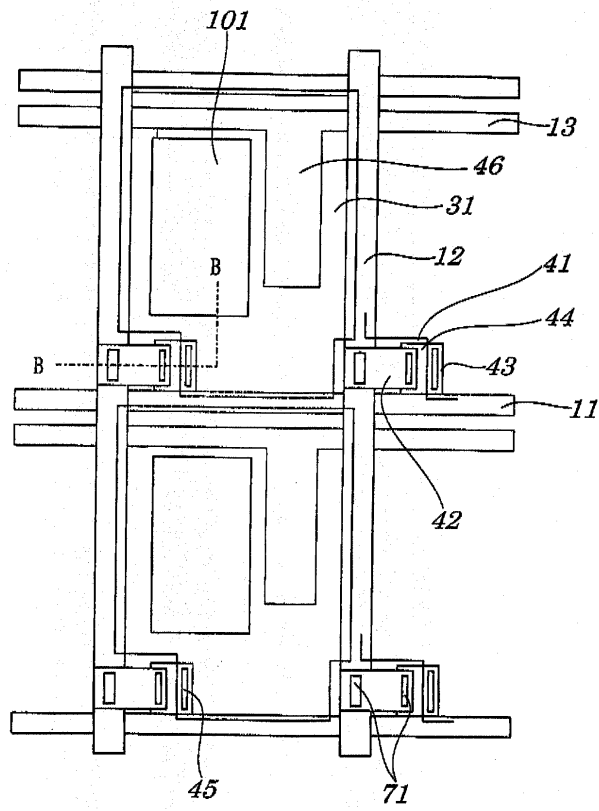
21

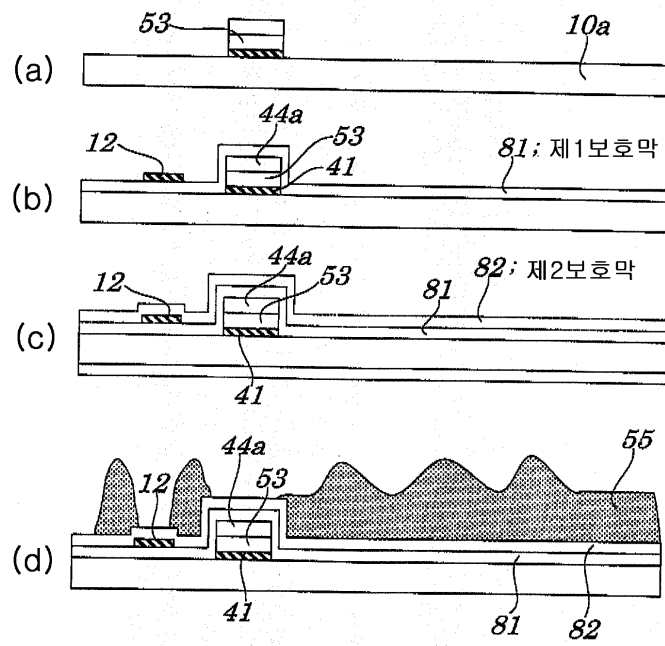




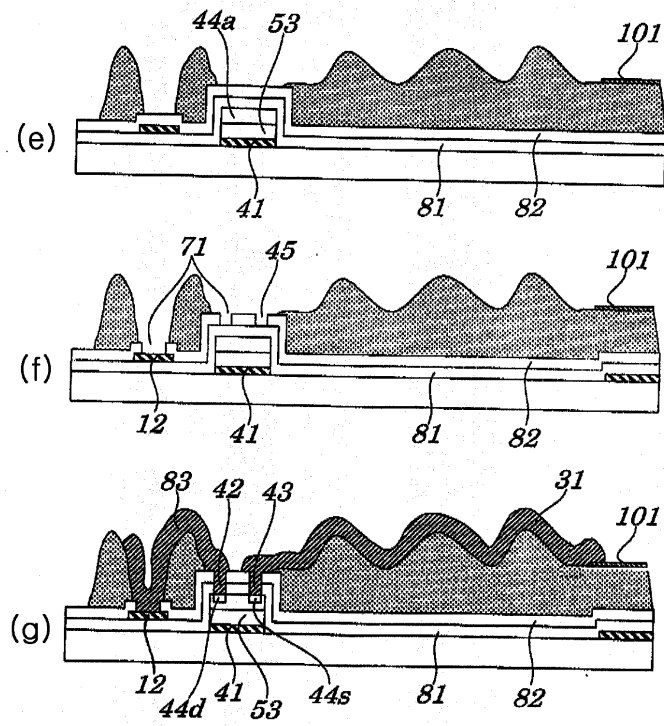


24

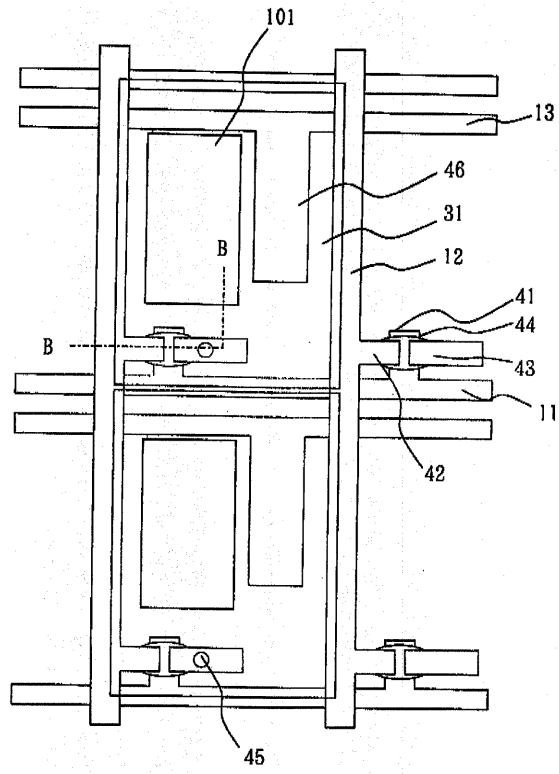




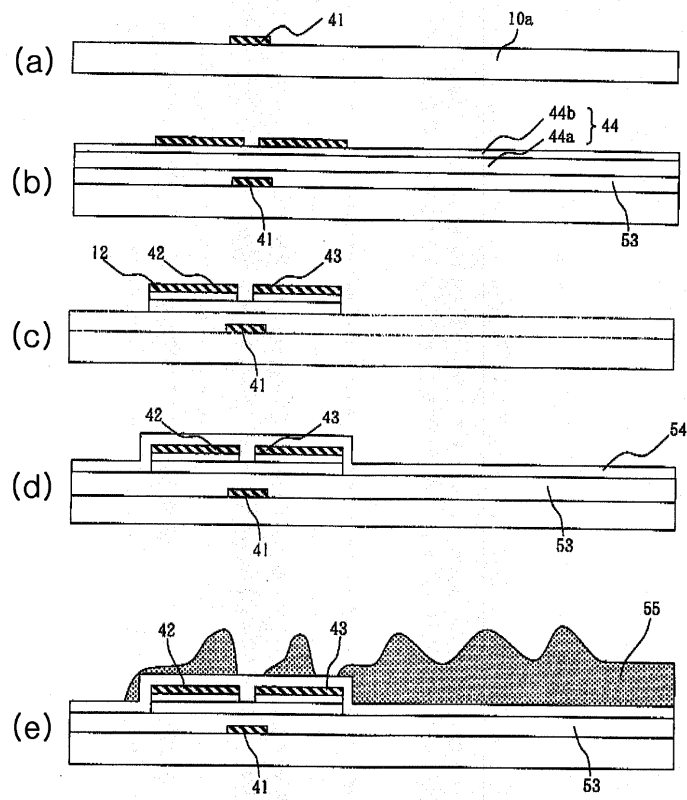
26



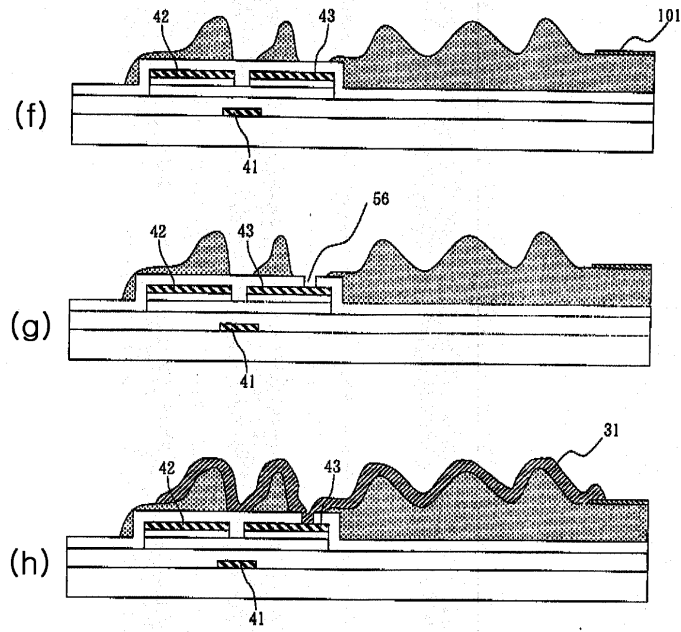
27



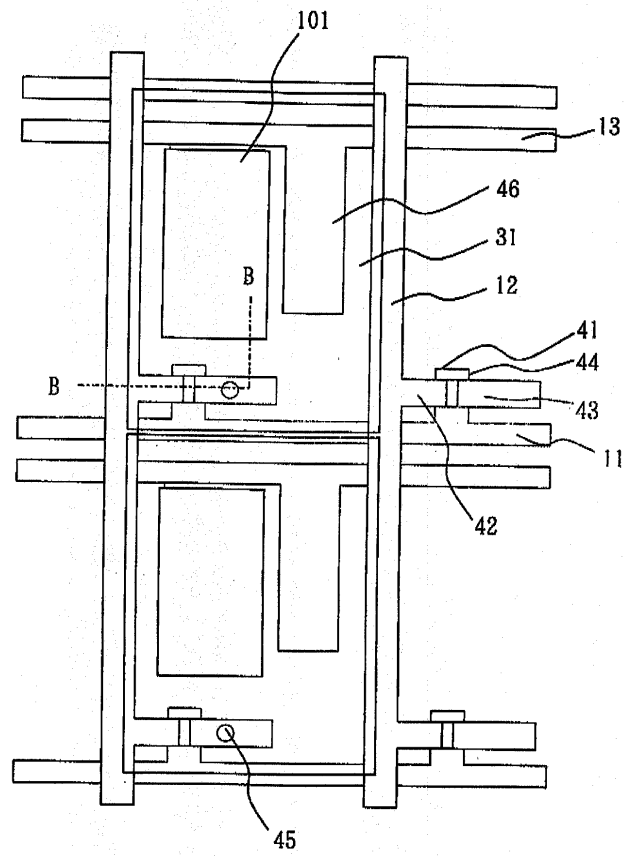
28

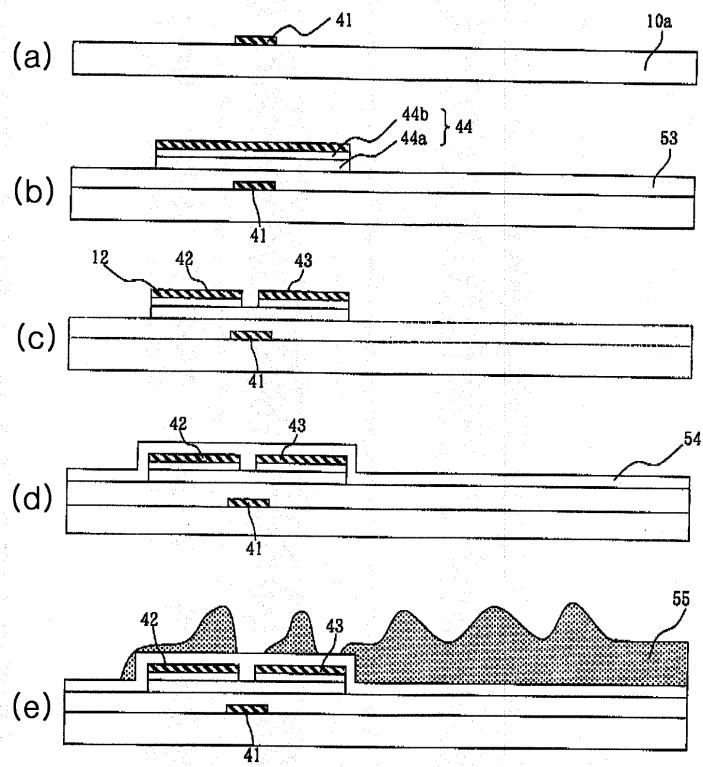


29

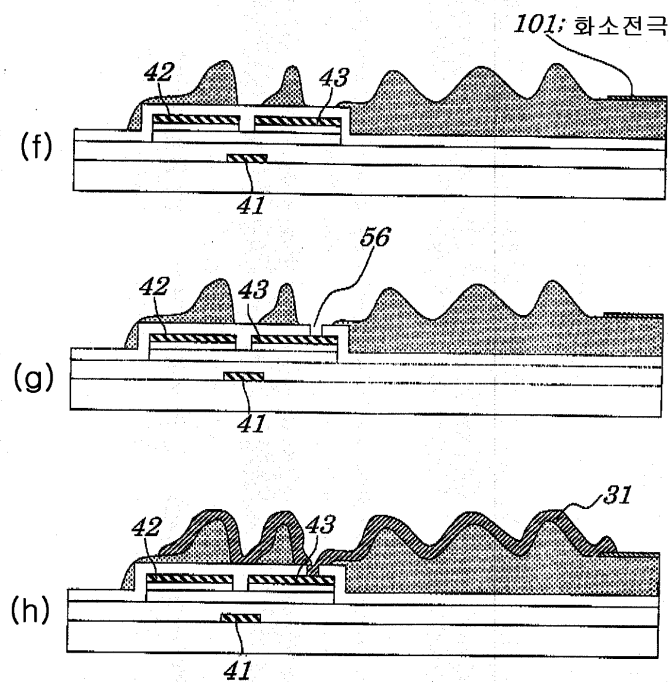


30

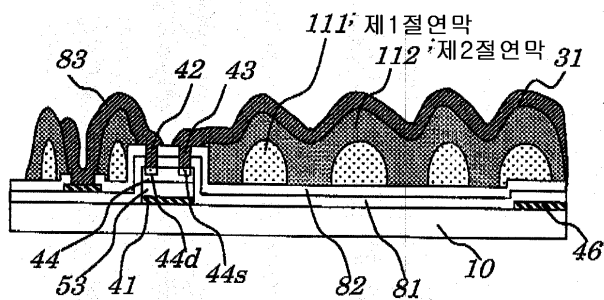




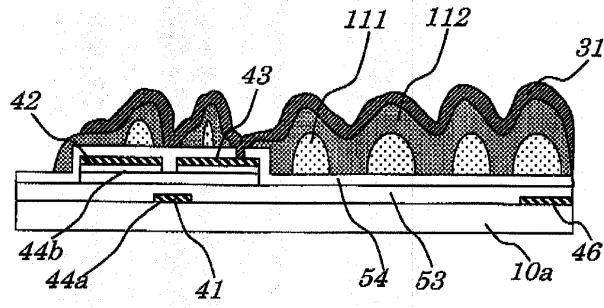
32



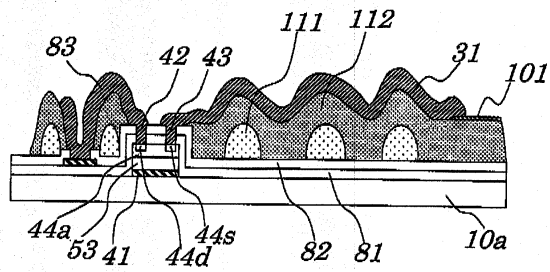
33



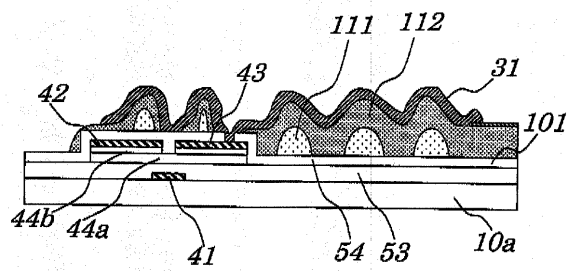
34



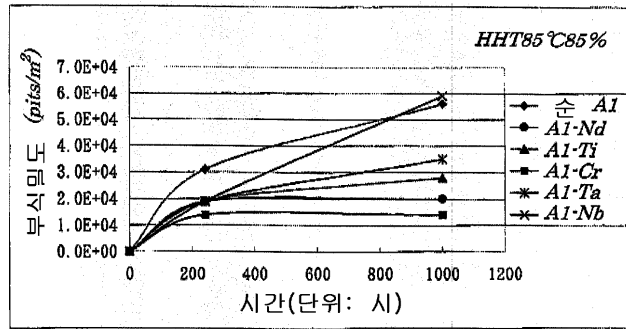
35



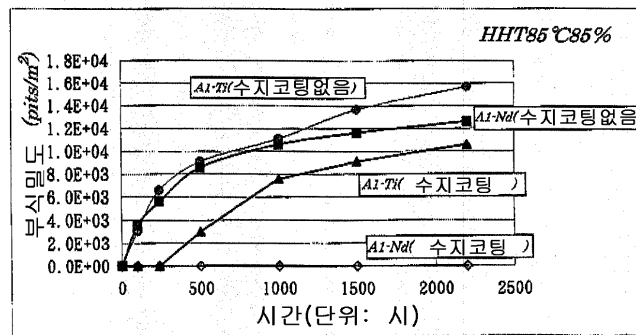
36



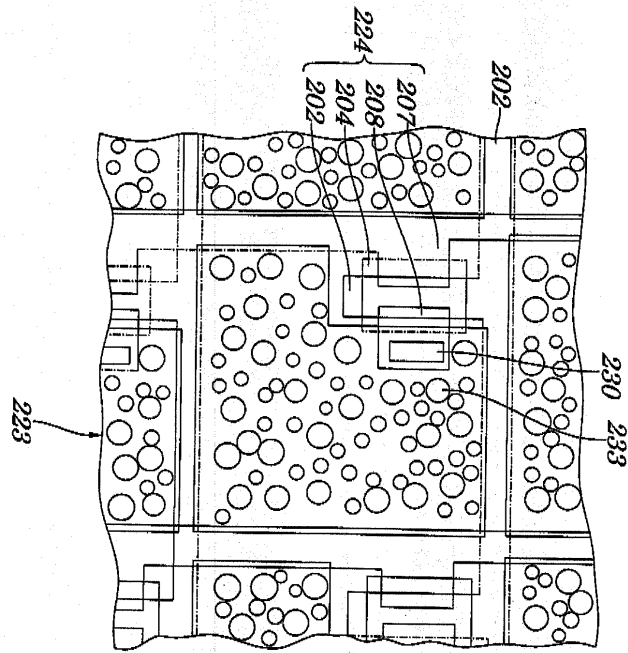
37



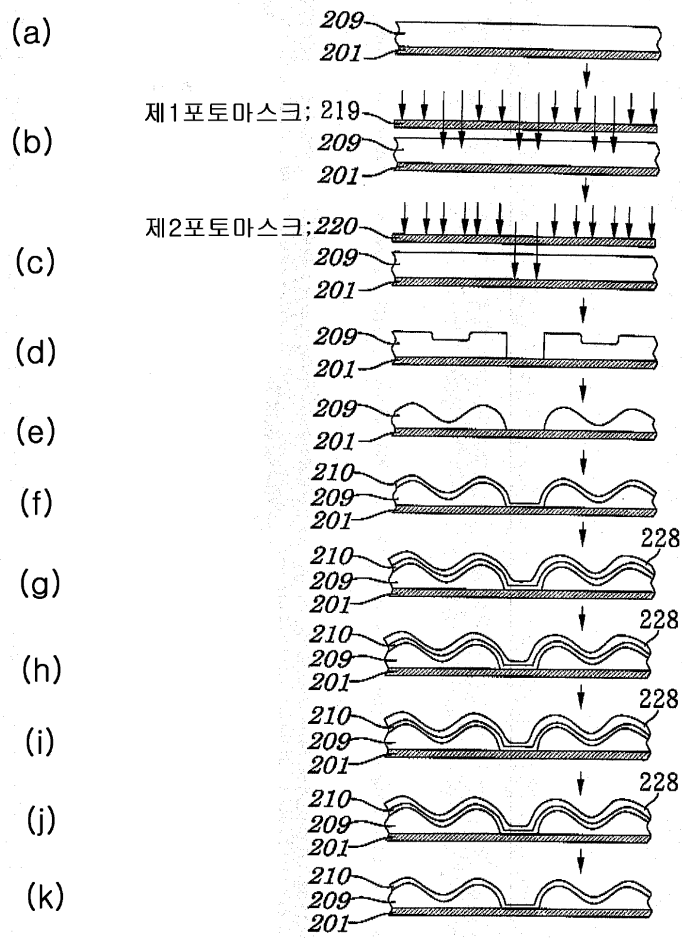
38



39



40



专利名称(译)	液晶显示装置及其制造方法		
公开(公告)号	KR1020020083947A	公开(公告)日	2002-11-04
申请号	KR1020020023169	申请日	2002-04-26
[标]申请(专利权)人(译)	NEC液晶技术株式会社		
申请(专利权)人(译)	日元号技术可否让这个夏		
当前申请(专利权)人(译)	日元号技术可否让这个夏		
[标]发明人	MAEDA AKITOSHI 마에다아키토시 YASUDA KYOUNEI 야스다교우네이 TANAKA HIROAKI 다나카히로아키 KIDO SHUUSAKU 기도슈사쿠		
发明人	마에다아키토시 야스다교우네이 다나카히로아키 기도슈사쿠		
IPC分类号	G02F1/1362 G09F9/30 H01L21/336 H01L21/3205 G02F1/1335 H01L23/52 H01L29/786 G02F1/1368 G09F9/35 G02F1/1343		
CPC分类号	G02F2001/136236 G02F1/136227 G02F1/133553 G02F1/13439		
代理人(译)	JO , EUI JE		
优先权	2001130454 2001-04-26 JP		
其他公开文献	KR100497759B1		
外部链接	Espacenet		

摘要(译)

用于反射型液晶显示装置的薄膜晶体管的工艺数量可以参考制造反射型液晶显示装置的方法可以减少。同时，它形成在有机绝缘膜上，其中连接到源电极的反射电极和连接到端子单元下层金属膜的端子单元连接电极具有薄膜晶体管的不平坦部分。含有Nd大于0.9%且具有优异耐腐蚀性的铝钕 (Al-Nd) 用作反射电极和端子单元的材料。LCD，反射电极，耐点蚀耐腐蚀，含铝合金。

