

8a 8h, 9a 9h, 10a 10h, 11a 11h 7 11a-11a, 11b-11b, 11c-11c, 11d-11d
-11d , 11c-11c , 11d-11d .

210 : 216 :

220 : 224a, 224b : ,

224 : 228 :

232 : 246 :

256 : 244 :

264 : 272 :

274 : 276 :

ch : T_D :

(Organic Electroluminescent Device) ,
가 (Active-Matrix Organic Electroluminescent Device)
가 가 가 가
(encapsulation) 가 PDP(Plasma Display Panel)
(frame) 가 가 (C_{ST} ; storage capacitance)
가 가 가 가
1
(scan line) 1 (signal line) 2 (powersupply line) , (pix
el area)

(addressing element) (T_S) (C_{ST})가
Switching TFT)가 , (T_S) (C_{ST})
, (current source element) (T_D)가 ,
(T_D) (+ ; anode electrode) (+)
(E ; Electroluminescent Diode) (- ; cathode electrode) .

(E) (+) (-) .

(T_S) , (C_{ST})
. ,
가 , 가
가 , 가 가 , 가
가 가 , 가
, , 가 ,
, 가 가 .
2 가 2 TFT ,
(51) , 1 (37) , (37) (51), (41)
(P) (41) .
(37) (51) (T_S)가 ,
(41) (T_S) (41) (T_D)가 , (134)
(C_{ST})가 . (31)
, 1 (58) 2 (58) ,
1 (I) .
'32' (T_S) (T_D) (T_D) , '35, 38'
, , ,
3 2 ii-ii .
, (1) (32), (38), (50, 52)
(T_D)가 , (50)
(42) , (52) 1 (58) .
(42) (32) (3)
4) , (42) (34) (C_{ST})

, 1 (58) (64) (66)
(I) .

(I) (30) , (1) (32)
(52) (42) 2 (44) (C_{ST}) 1 (58) 1 (50) (40) , (54)
, 4 (40, 44, 54, 60) 1 (58) 4 (60) 가 3 1
() .

, 4a 4i 2 ii-ii ,
PR(photo-resist) (exposure), (development) , (ph
otolithography) ,

4a , (1) 1 (30) , (30)
, 1 (32a ; active layer) (34)
.

, 4b , 4a (32a) , 2 (36) 1 (38) , 2
(32a)

4c , 4b (40) 2 , 3 1 (40) , 1
(42) (34)

, 4d , 4c (42) , 3 1, 2 (46a, 46b) , (48)
(32a) 2 (44) .

) 가 (32a) (iiib) , (iiia)
) , (iiib) .

, (32a)
(32b ; ohmic contact layer) , (32a) (32b)
(32) .

, 4e , 3 , 5 (4d 48) 1
(4d 46a) , (42) (iiib) (32b) (50)
, (50) (52) , 2 (4d 46b) (iiia)
(32b) .

(T_D) (32), (38), (50, 52)
.

, (42) , 1 (34) (52)
, (40) , (C_{ST}) .

4f , 4e , 4 , 6
(56) 가 3 (54) .

, 4g , (4f 56) (50) , 4
, 7 , (I) 1 (58) .

4h , 4g 5 , 8
(I) 1 (58) 1 (62) 가 4 (60) .

4 (60) (T_D) .

(62) 2 (66)

1 (58)

(64) , (64) 1 5

(58) 1 (58) 5 (64) 가

(work function)

5

1, 2 (70, 90)
(T_D)

1 (70)
(80)

1 (72)
(74)

1 (80)
(72)
(74)

2 (76)

(E) 1, 2 (72, 76) 1, 2 (72, 76) 1 (72) (74)

(94)가 2 (90) 2 (90) (E) (92)

(94)가 2 (90) 2 (76)

1, 2 (70, 90) 가 (85)

가 , 1,000

가 가 가

/

2

가 가 가 .

(, 1
1, 2) , 1, 2 () 2
; 1 2 ; 1 2 ; (a-
Si) 가 ; 가
; ;

가
가

PR(photo-resist)

2 ,
1 ,
1 1 ,
1 1 ,
1 2 ,
2 3 ,
2 4 ,
3 가 ,
5 3 ,
3 가 ,
3 6 ,
4 7 1 ,
5 8 ,

가

가

1

4

5

1

6

1

1, 2 (110, 150)

1 (110, 150)
(140)
(142)

(140)

(T_D)

(T_D)

(142)

(142)

(T_D)

(T_D)

(112),
(142)

(114),
(118)

(116)

(118)

2 (150)

1 (152)

(156a, 156b, 156c)

1 (152)

(160)

2 (162)

(160)

1 (152)

2 (162)

1 (154)

2 (1)

(156a, 156b, 156c)

58)

1 (152)

2 (162)

2 (158)

1 (154)

1, 2 (152, 162)

1, 2 (152, 162)

(160)

(E)

T_D)

가

(142)

(142)

2 (162)

2 (162)

(

1, 2 (110, 150)

가

(170)

1, 2 (110, 150)

(142)

(E)

(140)

3

2

가

/

가

가

-- 2 --

7 2 .
 (236) , 1 (242) (212) , 1 2 (212) (236)
 (212) (T_S)가 (214) , (236) (T_S) (226) , (226)
 (222) (230) , (214), (226) (230)
 , (T_S) (242) (T_D)가
 , (T_D) (212) (216) , (216)
 (228) (232) , (236) (216), (228) (232)
 (224)
 (242) (228) (244) ,
 (232) (IV) (276)
 (IV) 2
 (IV)
 , (230) (242) (234)
 , (234) (242) (C_{ST})
 (238), (212), (236), (242) (218),
 (240)가 , (240) (236)
 , (234)
 (218), (238), (240) (242)
 (258), (260), (262)
 (242) (262)
 , (238) (240) 가 ,

-- 3 --

8a 8h, 9a 9h, 10a 10h, 11a 11h 7 IIa-IIa, IIb-IIb, IIc-IIc, IId
 -IId , IIc-IIc , IId-IId , IIa-IIa , IIb-IIb
 ,
 8a, 9a, 10a, 11a , (210) 1 1 (216)
 (218)
 1 ,
 가 , PR , PR ,

8b, 9b, 10b, 11b , (216) (218) 1 , (220)
(a-Si), (n+ a-Si) (a-Si), (n+ a-Si) 2 , (216)
(224)
(224) , (a-Si) (224a) , (n+ a-Si)
(224b)
Nx) 1 , (Si)
8c, 9c, 10c, 11c , (224) 2 (228) , 3 (IIIa)
(224) (238) , (IIIb) (232) , (240)
(IIIa) , (IIIb) 2 ,
(W) (Mo), (Ti), (Cr)
(224a) (228) (232) (224b) (ch)
(216), (224), (228) (232) (T_D)
8d, 9d, 10d, 11d , (T_D) (238), (240)
2 (240) , 4 (228), (218), (238),
(252) 가 (246), (248), (250),
(256)
(248) (218) (220) (256)
가
2
8e, 9e, 10e, 11e , (256) 3 , 5 (218)
(246) (228) (244), (248)
(258), (250) (238) (262)
260), (252) (240)
(244) (244)
(262)
8f, 9f, 10f, 11f , (244), (258), (260), (262)
3 (262) 6 (232), (258),
(260), (264), 1 3 (266)
, 268, 270) 가 (272)
8g, 9g, 10g, 11g , (272) 4 7
(IV) (274)

(IV) , 2
4
8h, 9h, 10h, 11h , (274) , 4 8
(264) (232) , (274)
(276)
(10g 260), 4 (11g 262) (9g 258),
가 , 가
(57)
1.
1, 2 1 () 2 () , 1, 2
1 1 ;
1 2 ;
2 , ;
(a-Si) 가
가 ;
2.
1 , 가

3.

2

4.

3

가

5.

1

6.

5

7.

PR(photo - resist)

1

1

1

1

2

2

3

2

4

가

3

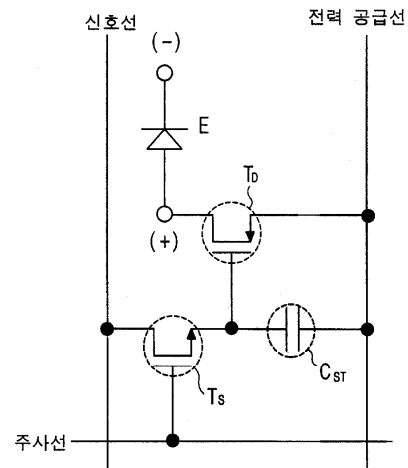
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1 3 가 ; 6

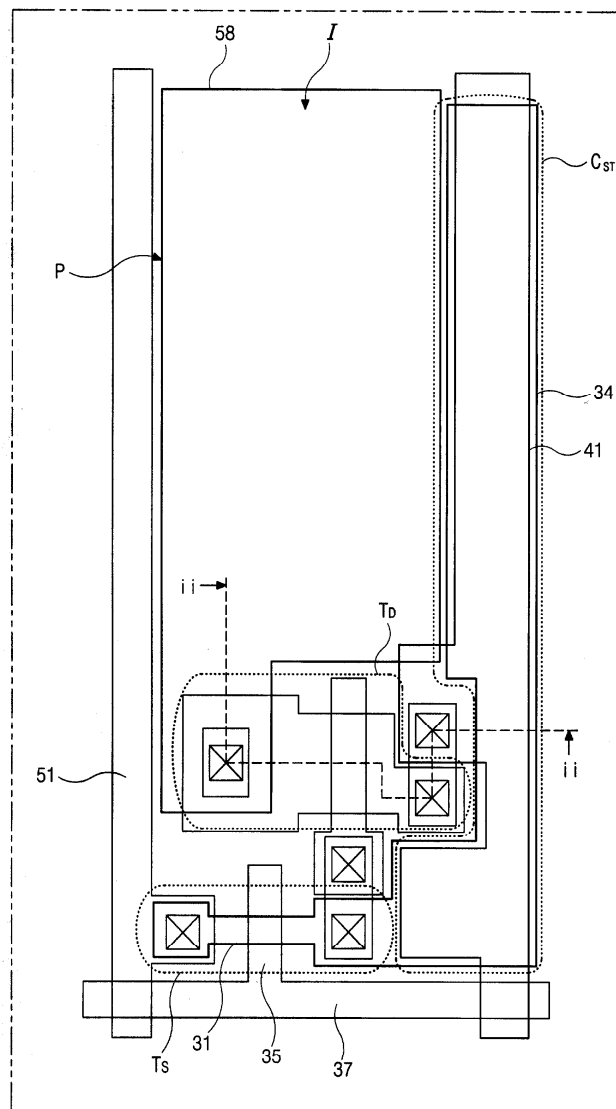
4 7 , ;

5 8 ,

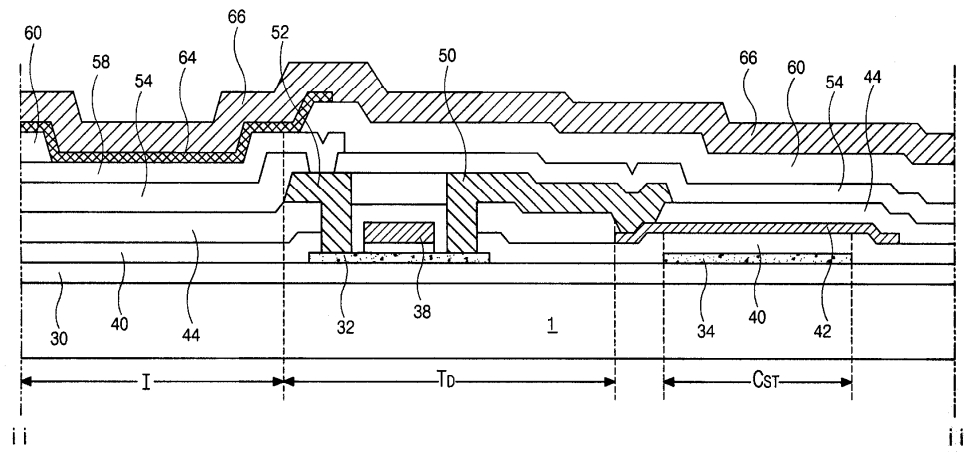
1



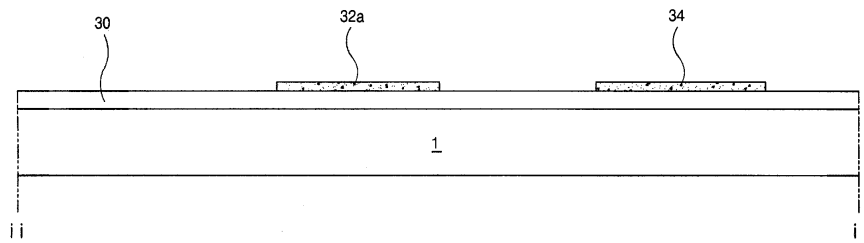
2



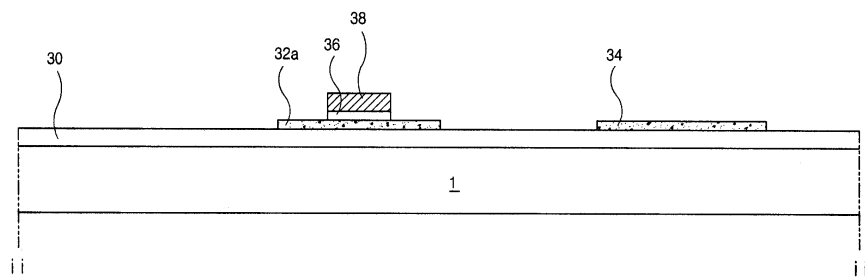
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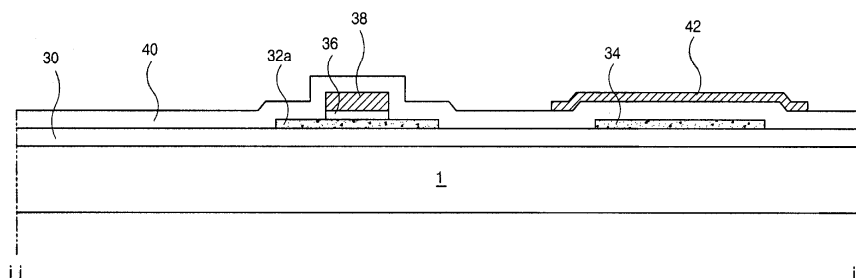
4a



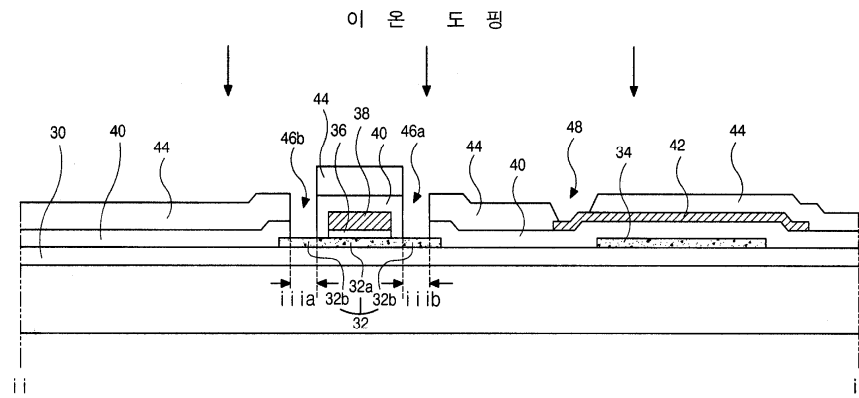
4b



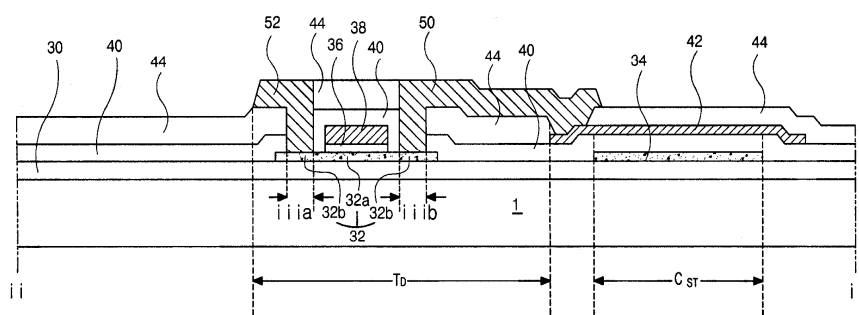
4c



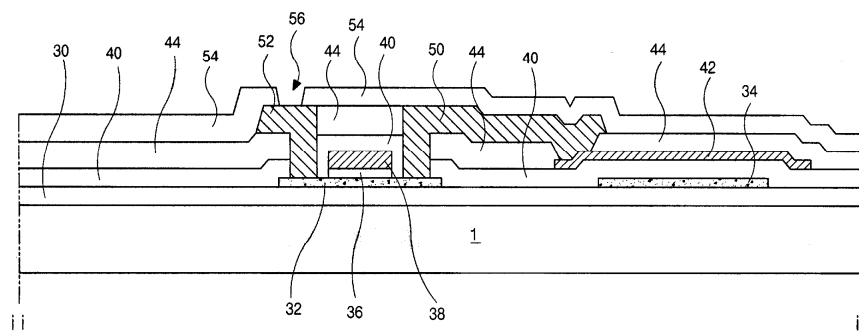
4d



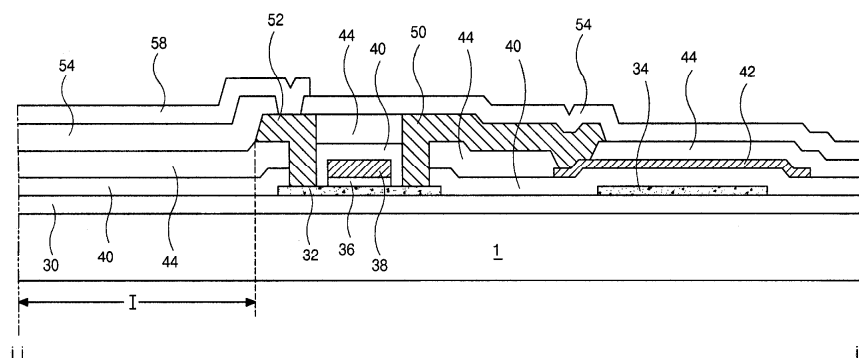
4e



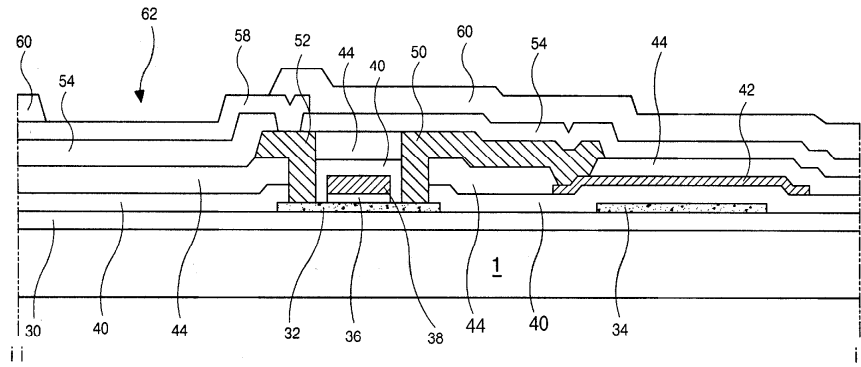
4f



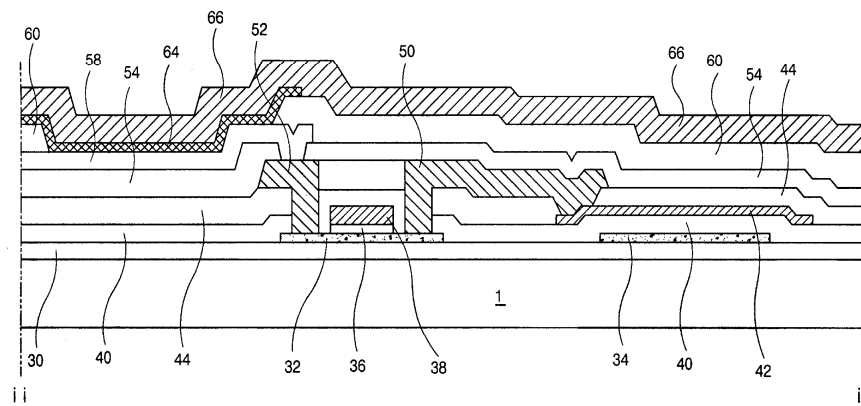
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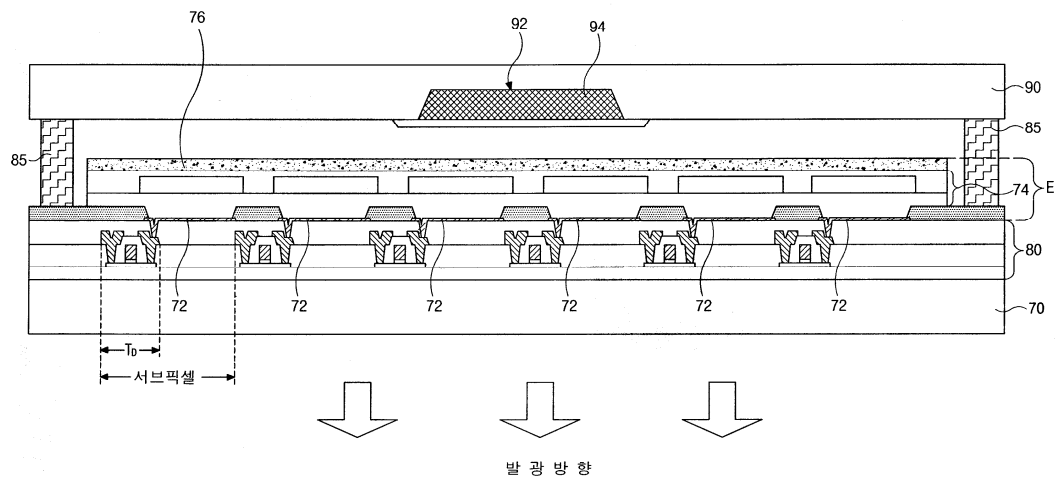
4h

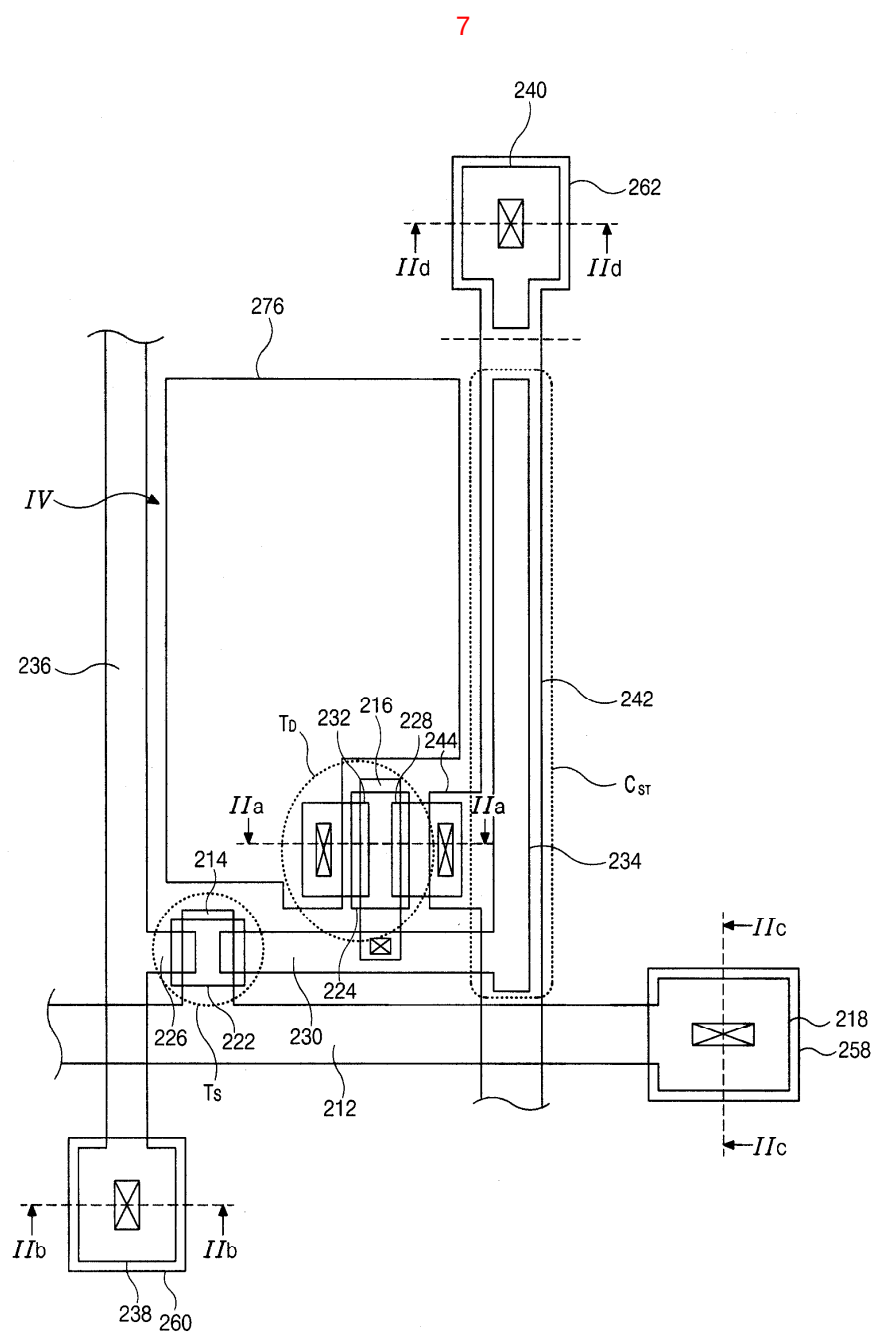
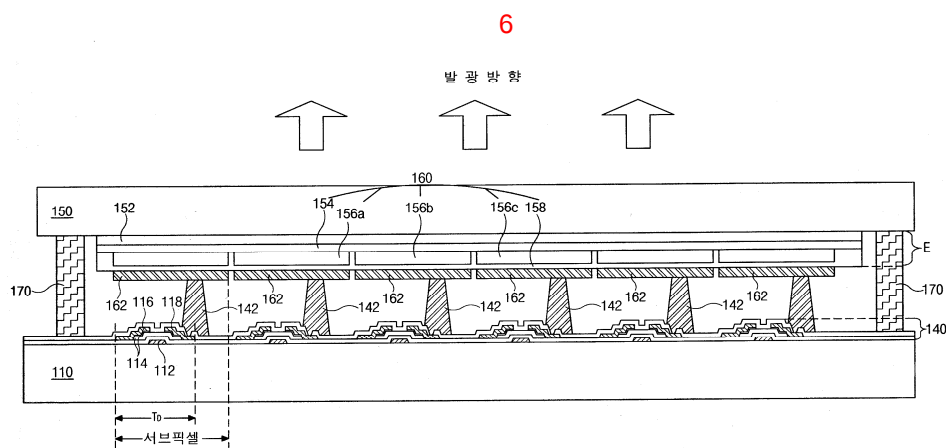


4i

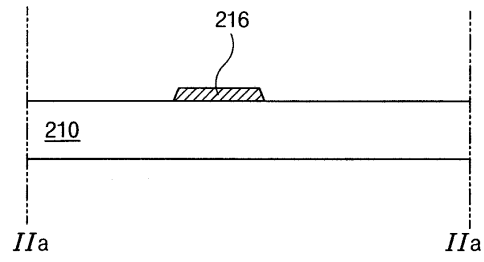


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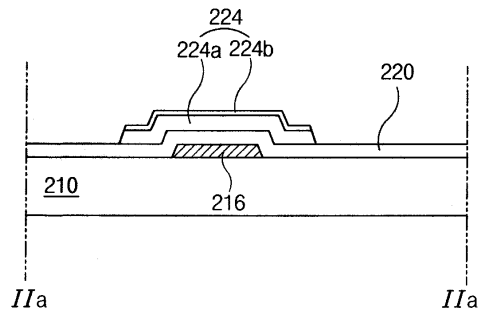




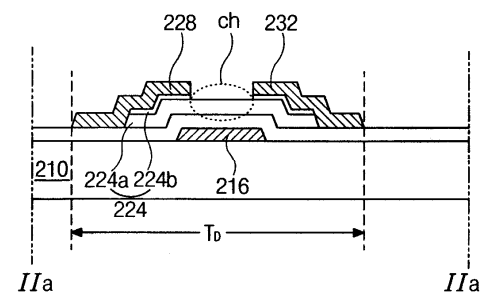
8a



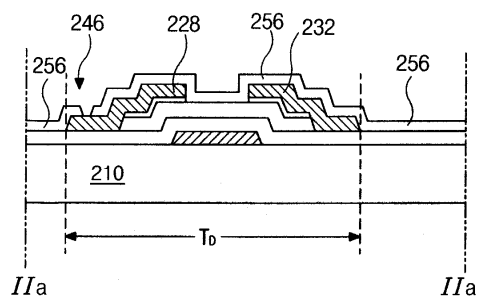
8b



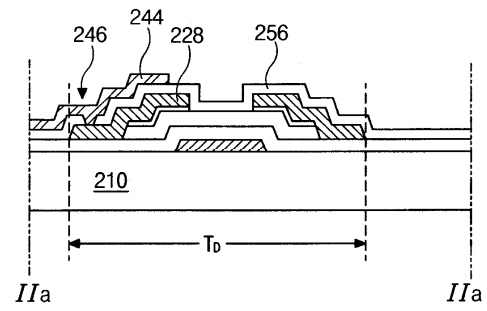
8c



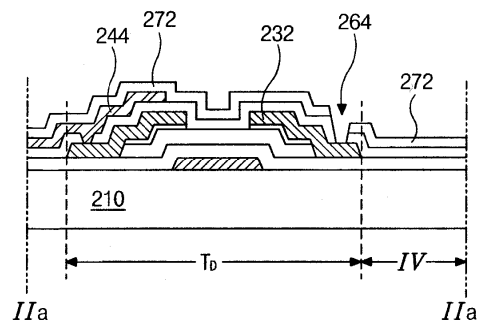
8d



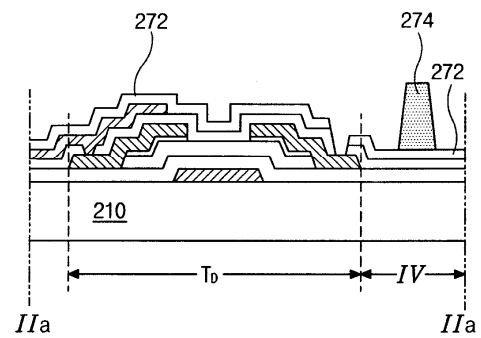
8e



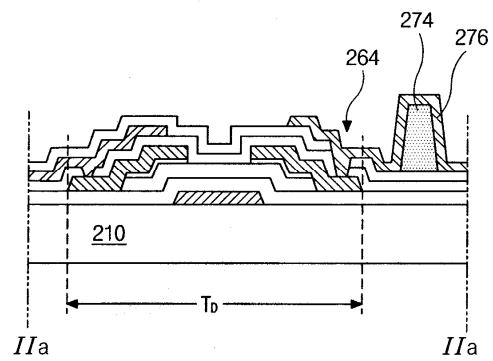
8f



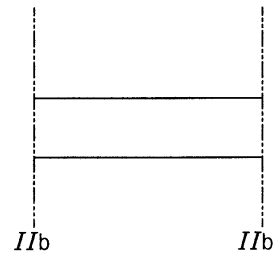
8g



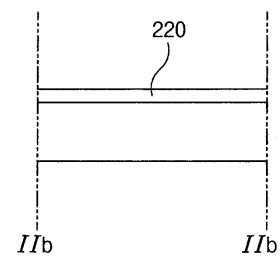
8h



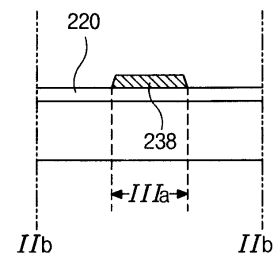
9a



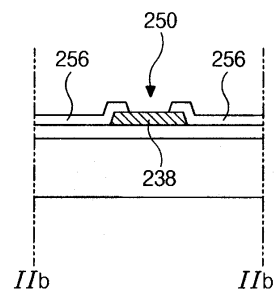
9b



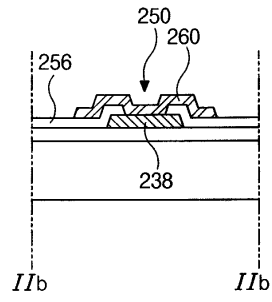
9c



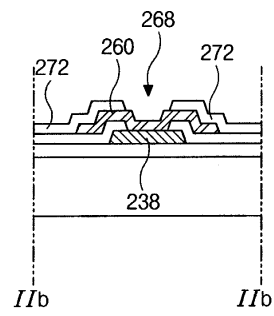
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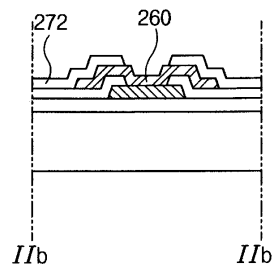
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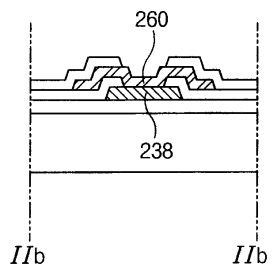
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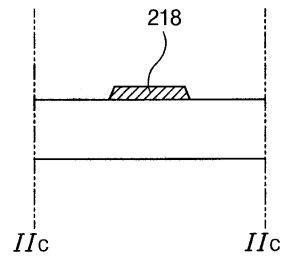
9g



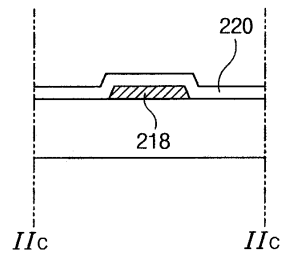
9h



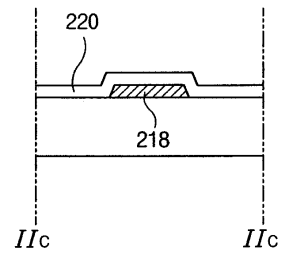
10a



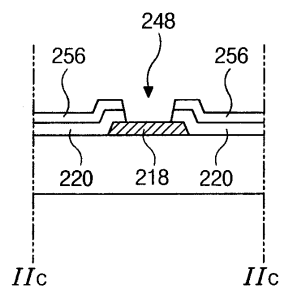
10b



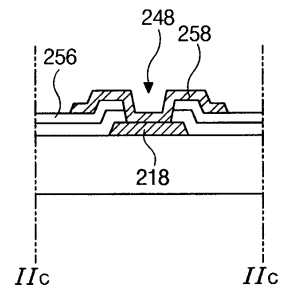
10c



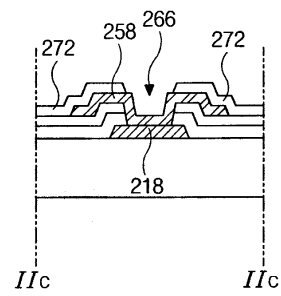
10d



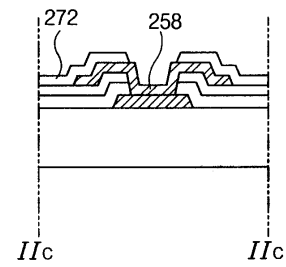
10e



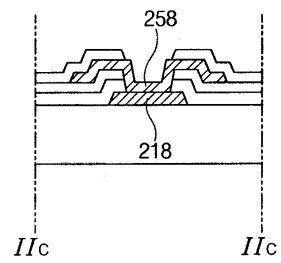
10f



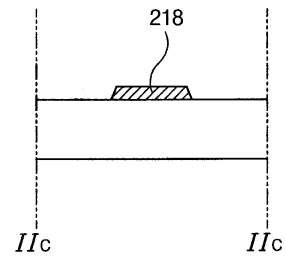
10g



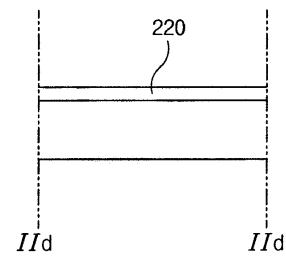
10h



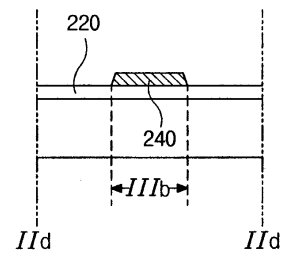
11a



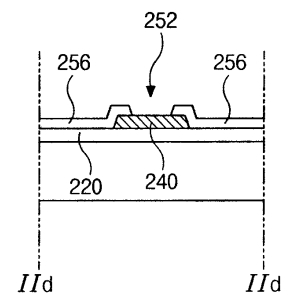
11b



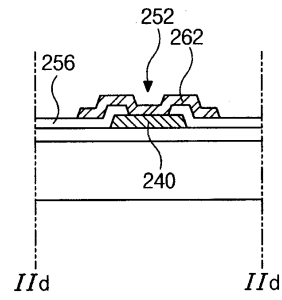
11c



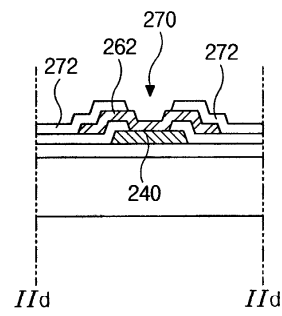
11d



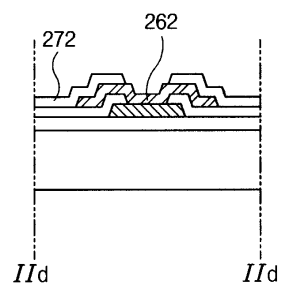
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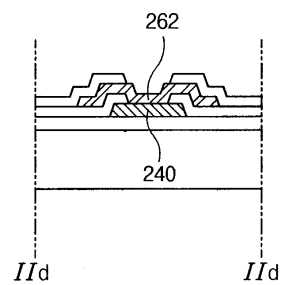
11f



11g



11h



专利名称(译)	双面板型有机电致发光器件及其制造方法		
公开(公告)号	KR1020040058444A	公开(公告)日	2004-07-05
申请号	KR1020020084570	申请日	2002-12-26
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG显示器有限公司		
当前申请(专利权)人(译)	LG显示器有限公司		
[标]发明人	PARK JAEYONG		
发明人	PARK, JAEYONG		
IPC分类号	H05B33/00		
CPC分类号	H01L27/124 H01L27/3253 H01L27/3262		
其他公开文献	KR100502162B1		
外部链接	Espacenet		

摘要(译)

根据本发明的双面板型有机电致发光器件及其制造方法。首先，由于在不同基板上形成阵列器件和有机发光二极管器件，可以提高产量和生产管理效率。它可以增加产品周期，其次，对于使用非晶硅材料的反向交错TFT结构的草药，低温工艺是可能的，它是顶部发射型。它具有在不添加掩模工艺的情况下进行该工艺的优点，尽管它增加了单独的电接触图案。

