

(19) (KR)
(12) (A)

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(21)	10-2002-0010282		
(22)	2002 02 26		
(71)		3 416	
(72)		973-3	803 1604
(74)			
	:		
(54)	-		

- / 가 /
가 가 . /
TFT
3
- , ,
1 -
2 -
3 -
4 - TFT
5 4 1

1 (130) , - (100) (110), (120) TFT

TFT (130) (131), (132), (133), (134), (135)
(136) 136a .

(132) (131) (132)
가 (133)
(132)가 (131) (133)
1 (133a) (132) (133)
b) . (133)

(134) (133a) (133)
(132)

(135) (134) (135) (135a)
(135) 가 (134) 가

1 (136) (135) (131)
(136) (136a) .

110 (100) ()
110 (111), (112), (113), (114) (115) .
(111) (112) , TFT (130)
(135) (135c) .

(111) (135) 1 (113)가
(113) ,

(114) (113) (111)

(115) (114) (111) , (115)
(115a) .

TFT (130) (110) TFT (130) ()가 () (110)
, (120) 1 (110) TFT (130)

- (100)
() TFT (130) 1 (110)
(113) - (111) (140) (135a) - (120) -
() (111) - (113) - (120) - (135)
(135) (120) - (11)

3) - (111) (140) .

(113) (113)

(113) 가
(120) (113)
(135) (113) .

(113) A B

(113)

(113) C

A B가 A B 가 C

(113) 가

(113)

(100) TFT (130) (133) (133a)

(133a) (133) 가 (133b)

(133b) (133a)

(133) (133a)

가

1

2

1 , 1 , 1 , 1

1 / , 1 / 2 , 2 가 2 1

2 , 2 1 2

1 2 1 1 1 1

1 / 2 , 1 2 가 2 1 2 / 2 , 1 2

2 (200), 2 (300) (400) (800) (700)

1 (200) 3 4 1 (210), (220), (2
30) 1 (240) . , 280 , 285 .

, 1 (210) (210) 가 1
(210) (220) 4 5
(221, 222, 223, 224; 226) (229) .

, 4 5 (226) (221), (222), (223
) (224) .

, (221) 6 1 (210) 1 , 1
1 (221a), 1 (221a) 2 (221b) 1
, 1 (221a) (CrO₂ film) , 2 (221b) (Cr film) .
(221) (221) 1 (221a)
1 (221a) .

, (221) 2 (221b) (229) (228)
(228)
(Indium Tin Oxide) (Indium Zinc Oxide)

, 6 (222) (221c) (221)
, (222) (221) 1 2 .
(222) (221) (222)
n + , n + (222)

, 5 6 (222) (2
23) (224) 4 5 (223) (229
) (227) (227) (223) IT
O IZO .

, 6 7 (220)
(230) (230) (226) (224)
(235) .

(235) (226) (224) 1 (240) 1 (240
) ITO IZO .

, 3 2 (300) 2 (310), / (340), (700)
(350), 2 (360)

, 8 (315) 2 (310) (315)가
(315) 2 (310) .
(315) 2 (310)

(315) 가 3 8 2 (310)

, 3 8 / (340) 2 (310)
(315)가 / (340) (315)

, / (340) 2 가 가 . , / (320) /
 (340) 8 (330) .
 , / (320) 2 (310) (315)
 .
 , Nd, Si, Cu, Zn, Ti, V, Co, Ni, Sn, Ag, Pd, Mo, Zr, Hs, Ta, W, Au .
 , / (320) 30% 50% , 50% 90%
 .
 / (320) - (Al-Nd) 20 800 (330)
 .
 , (330) 5000 (Ag) . ,
 (330) / (320)
 , (330), / (320) (330) 9 10 (335)
 (335) / (320) 가
 (330) , (335) 가 . ,
 가
 / (340) 9 ' ' ' ' ,
 1 (391) (330) / (320) (320)
 , (330) 가 1 (391) (330) / (320) (330)
) / (320) 가
 .
 , 가 가
 , 2 (392) / (320) (330) 가 2 (392) 가 .
 .
 , / (340) 1 (200) 1 (240) (400) 가
 (370)가 (240) (370) (330)
 (330) (O₃) , (370) (330)
 .
 2 (310) / (340) (370)가 2 (310)
) 3 (350)가
 , (350) 1 (240) 1:1 .
 , 1 (240) (350) (350) 가 10 (mode)
 . , (350)
 (359) (350) 9 (353), (356)
 (356) (353) , (359)
 .
 (350) , (356) 가 11
 , (356) 1 1 (356a), 1 2

2 (236b), 2 3 3 (356c) .

35) , 1 (356a) (350) 가 (330) (3 (356b) 2 (236b) 3 (356c) 9 11 (330) (335) (350)가 .

(350) 3 가

(393) 1 (200) 11 (400) (350) 2 2 (356b) 2 (356b) , 2 (356b) (400) 0) . (356b) 2 (356b) 2 (356b) (35

356a) 2 (400) , 1 (200) (394) (350) 1 1 (356a) 1 (350) 1 (356a) (350) 2 (356b) .

(350) 3 (356c) (350)가 (330) 3 (356c) 2 (356b) 1 (356a) .

12 13 -

12 - TFT

12a 가 1 (210) .

1 (210) 12b 12c (221) .

(221) , 12b 1 (210) 1 (221e) , 1 (221e) 1 (210) 2 (221d) (Cr) . , 1 (221e) 1 (CrO₂) , 2 (221d) (310) 12c 3 4 (221a, 221b; 221) .

(221) 4 (column) (221) (4 , 228) , 1 (310) 12d (Indium Zinc Oxide, IZO) , (Indium Tin Oxide; ITO) (128a) .

(128a) 4 .

(221) (228) , 12e 1 (210) (221c) .

(221c) 12f () , n⁺ (222) .

, (222) 1 (210) / ()
 . / 12f (223) (224)
) , 4 (227) (227) ITO
 IZO .
 , (227) (row)
 (223) .
 , 12g , (223) (224) 1 (210)
 (230) . (230)
 (230) 12h (224) ()
 235) . (230) (240) . 1 , (24
 0) 12h 4 1 (240) . 1 (24
 , 1 (240) 1 (240) 12i (280)
 , (280) (285) .
 , 13 2 (300)
 .
 , 13a 2 (310) 2 (310)
 (315)가 .
 10) , 13b (317) , (317a) 2 (3
 (317) 가 .
 (317) (317a)가 .
 , 2 (310) (315)
 2 (310) (317) ,
 (317a) , (315,317a)
 .
 , 2 (310) 13a (315)가
 (315) 13c / (320) (330) .
 . , / (320) 20 800
 (320) . / (320) 5000 /
 (332) . , (332) (Ag)
 .
 , / (320) (332) (332)
 13d (331)
 (331) (332)
 .
 , 13d (331)
 (344)가 .
 (344) (331)
 335) , (331) 4 (332) 9 (227) (

(344) (331) 13d

(331) 13e - (etch back)

가 (332) (335) (331) 가

330 / (320) (335) (330) (332)

(331) (331) 가

13f

30) 13g (370) (330) (331) (Ag) (3

(310) (330) (350)가 (370) (350) 2

13h (353)

(353a) 2 (353) (310) 1 13h (h1) 13j 13h

(353a)

13i 2 (310) (353b)가

13i 9 A (353b) A B 가 C

C 가 A B 1 (h1) 가 2 (h2)

가 C 351

13k (355) (350) (355) 2

(360)

(57)

1. (a) 1, (b) 1, (c) 1 ;
- (a) 1, 1, 2, (b) 2, 2, (c) 2, (d) 2 ;
- 가 2 / , (c) 2 / , (d) 2 ;
- 1 2 / .
2. 1, 1 / . 2
3. 1, 2 / .
4. 1, / 1 2 1
- 2 / , 2 / .
5. 4, / 20 800 / .
6. 1, / (a) 1 2 1
- 2 / , (b) 2 / , 1
- 2 / .
7. 6, / 20 800 / .
8. 6, 1 / .
9. 8, /
10. 6, 3 1, 1 1, 1 2, 2
- , 2 3, 1 / , 2
- 3 .
11. 8, 3 (groove) 3 3
- 2, 0(zero) / .

12.

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

13.

12 , 1 1 , 2 1
 2 / .

14.

1 , 2 2 가
 / .

15.

() (a) 1 1 1 ;
 (b) 2 2 1 1 1
 , 2 / 2 가 2 / 2
 , 2 2 ;
 () 1 2 ;
 () 1 2 /
 .

16.

15 , 2
 / .

17.

15 , 2 ,
 / .

18.

15 , / 2 20 800
 - / .

19.

15 , / () 2 20 800 (A
 , () (Ag) , () -
 g) , () (Ag) / .

20.

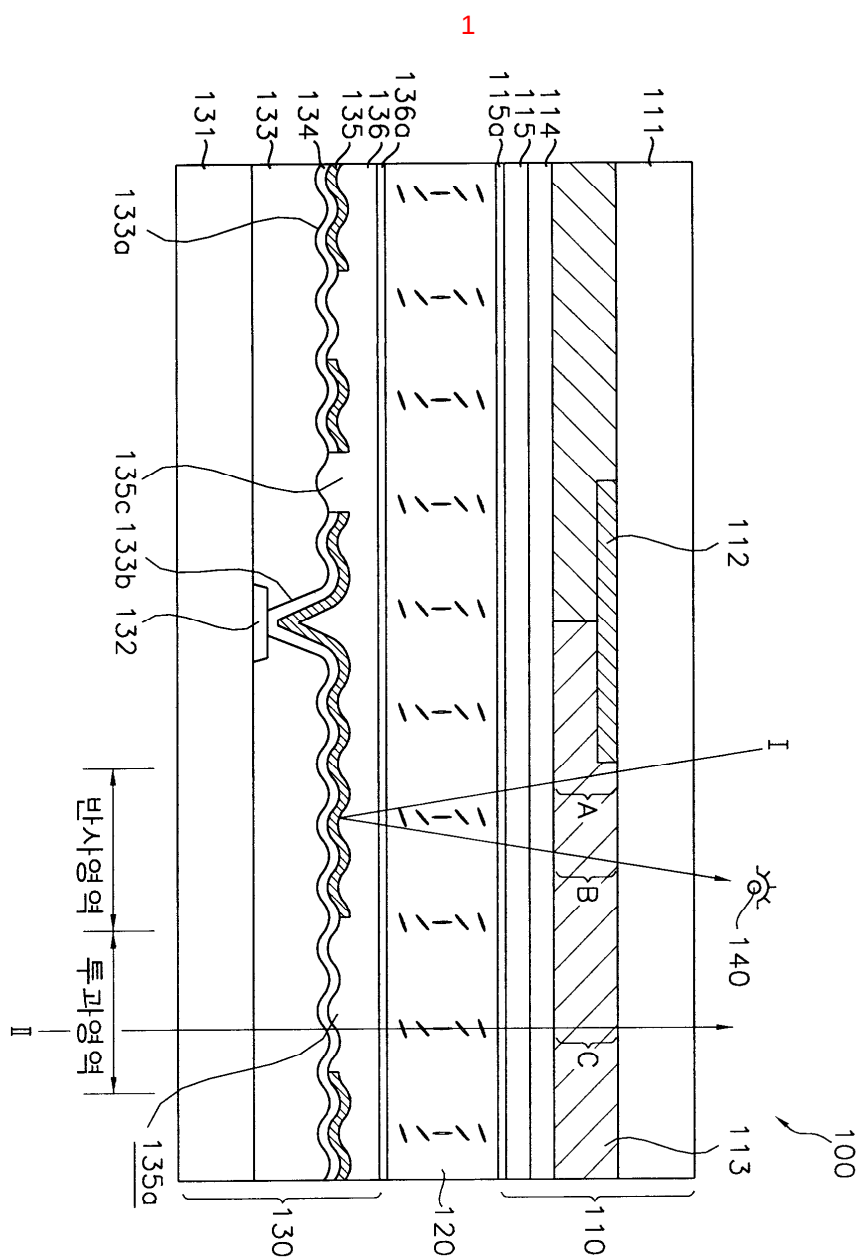
15 , (a) 1 /
 , (b) 1 , 2 (Ag) 3
 1 2 , (Ag)
 , (c) / .

21.

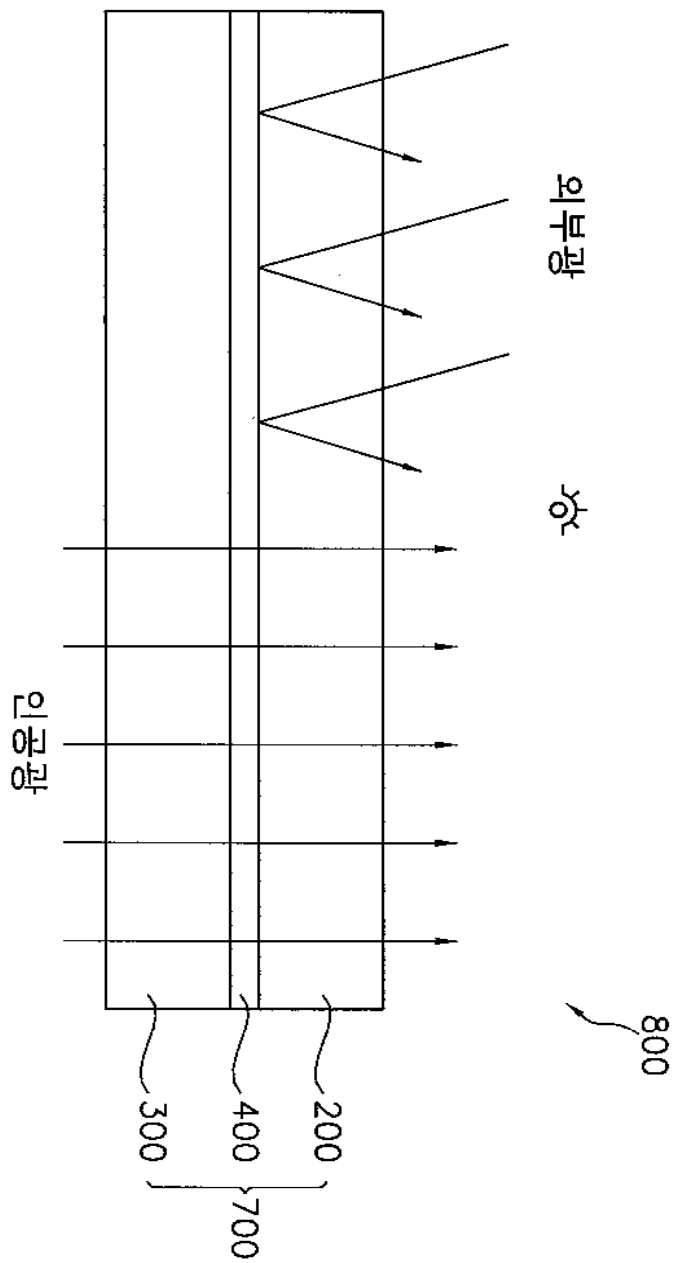
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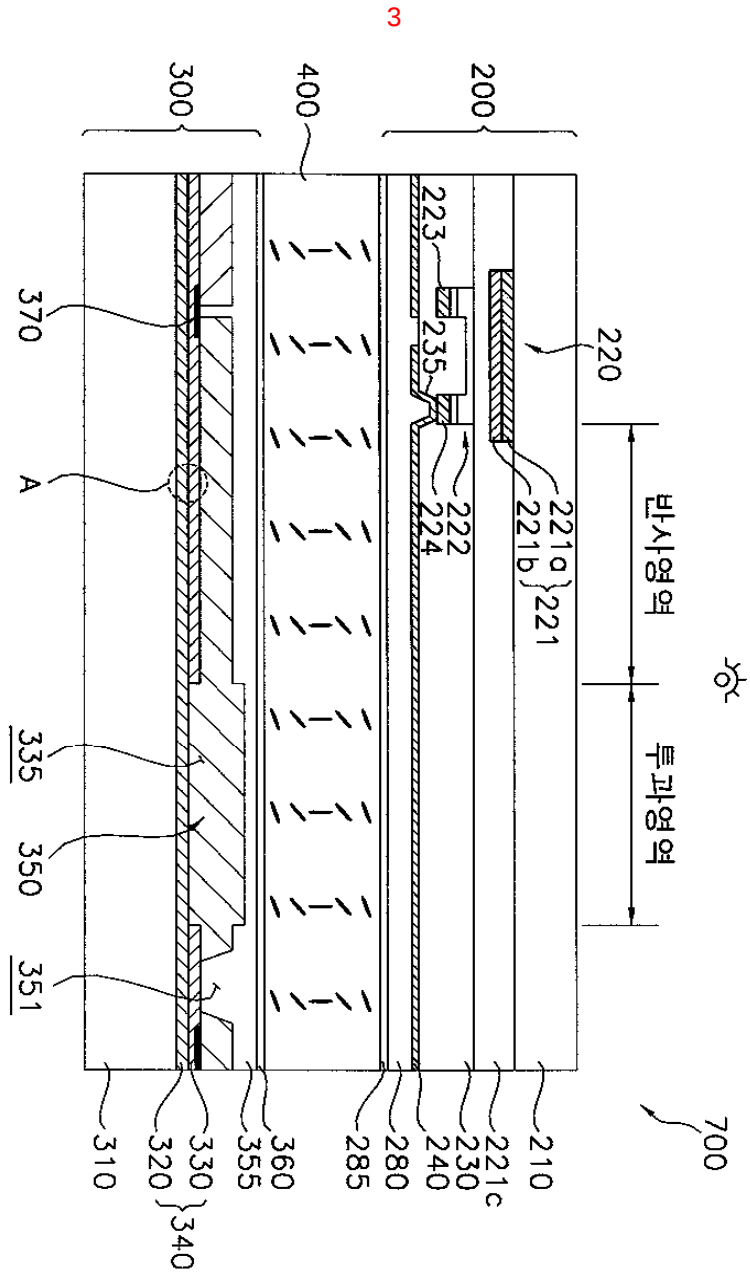
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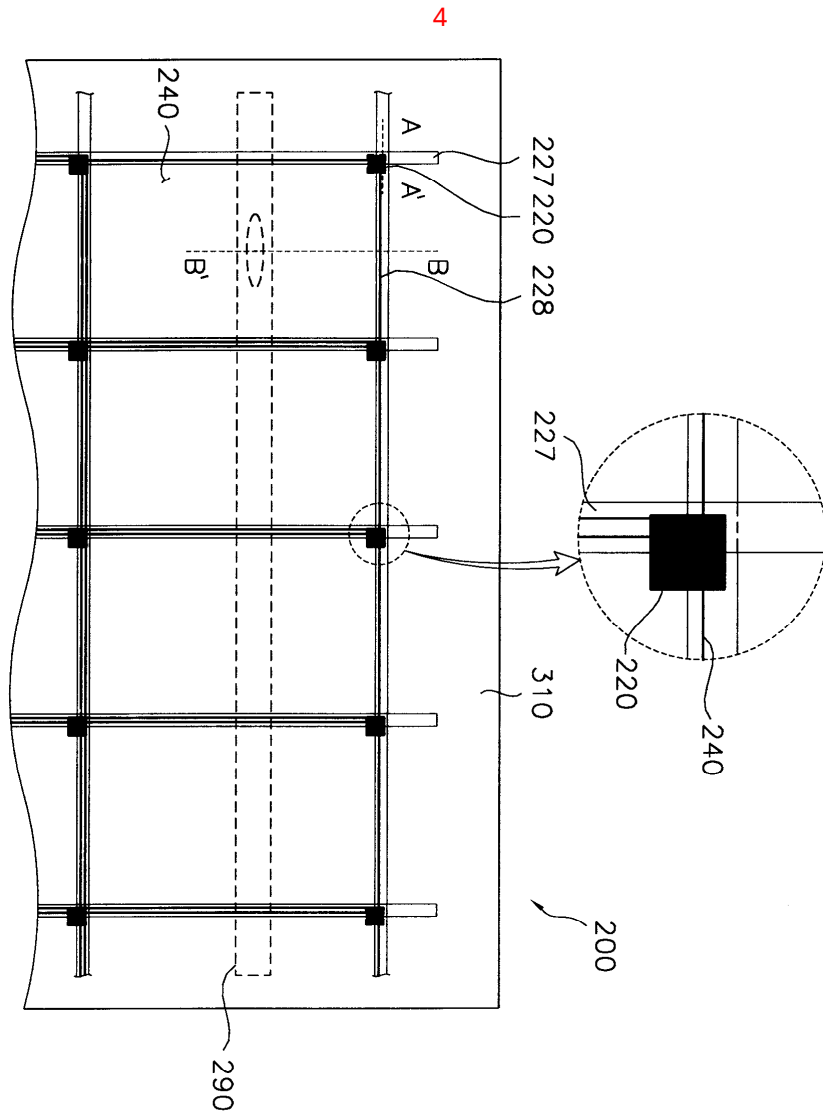
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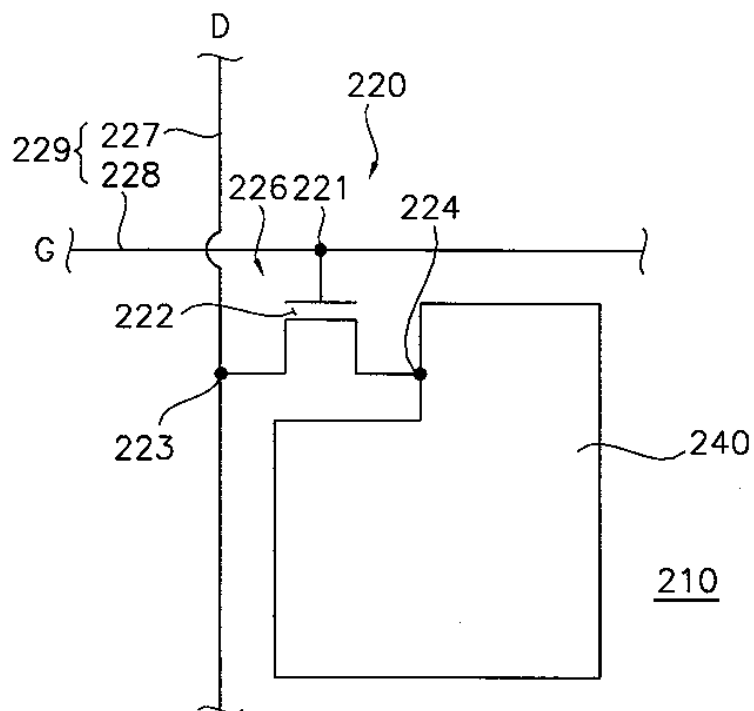
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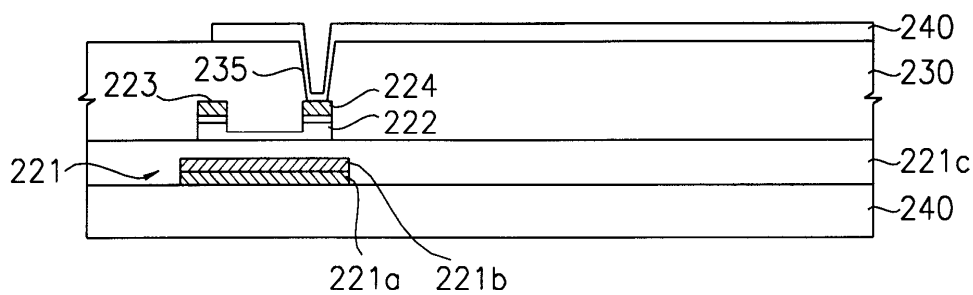




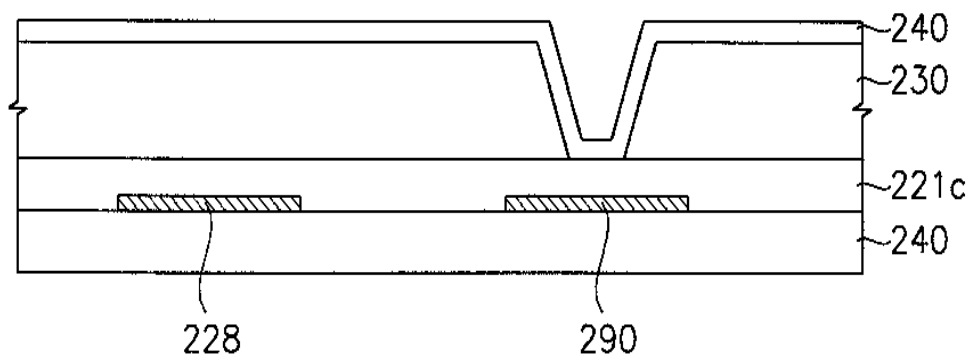
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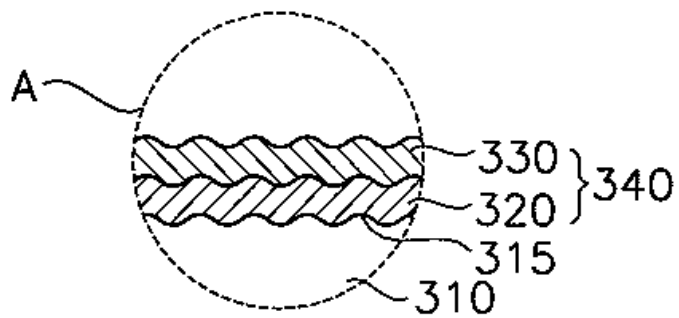
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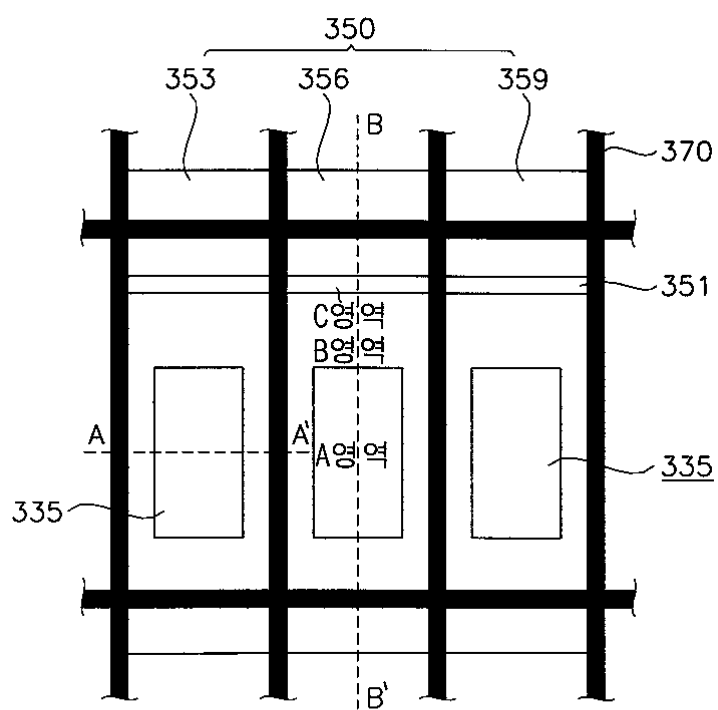
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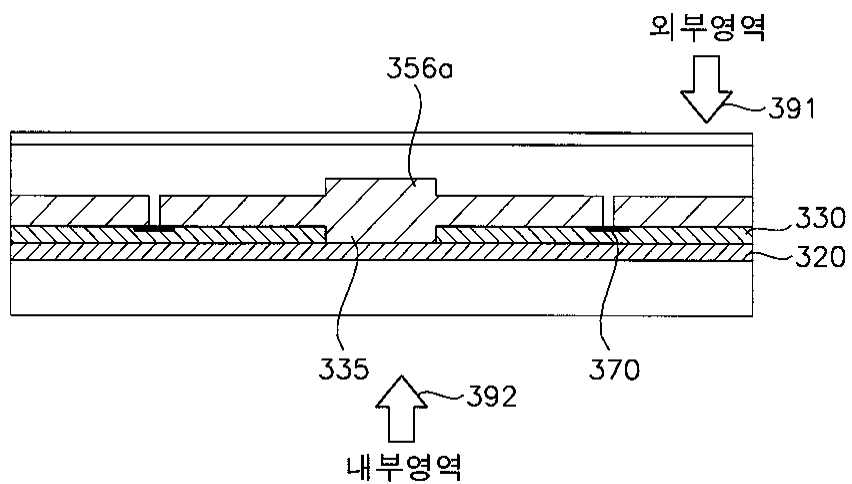
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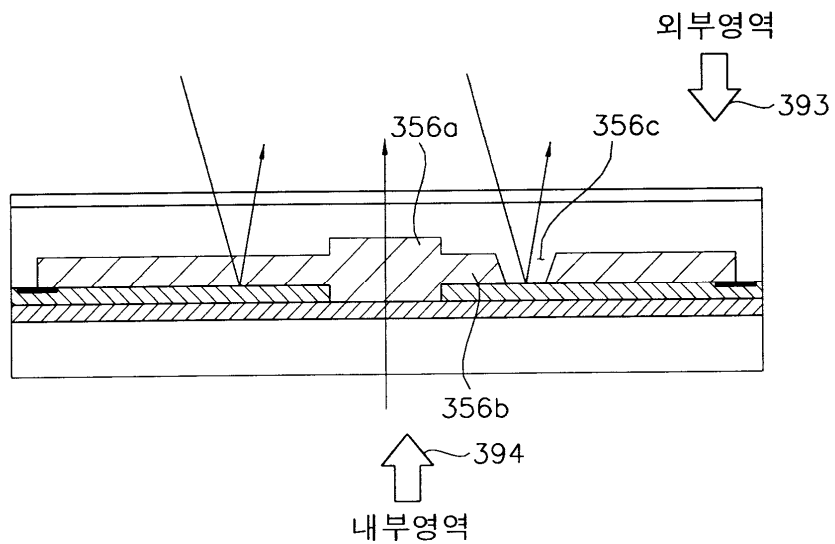
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10



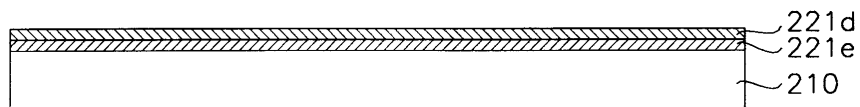
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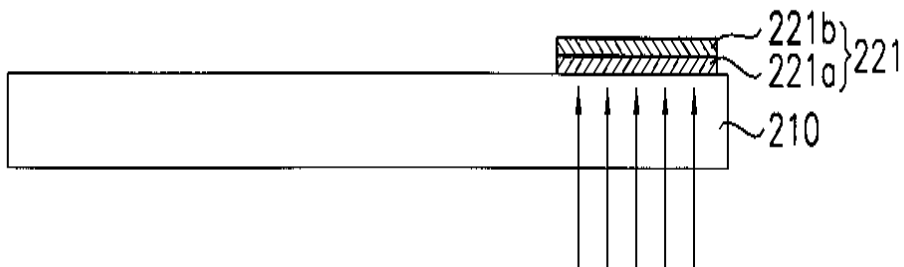
12a



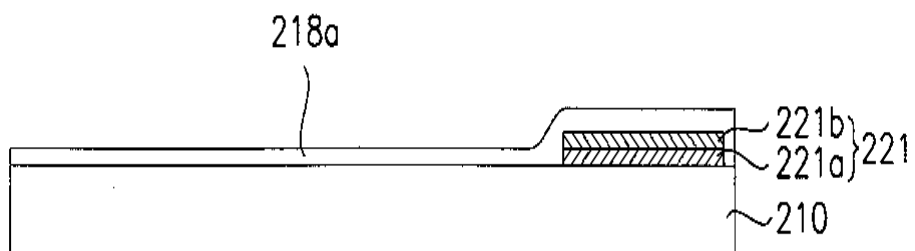
12b



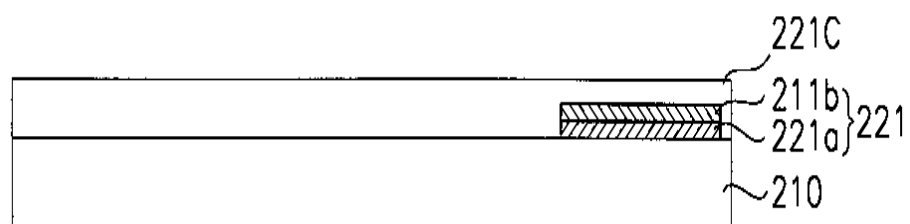
12c



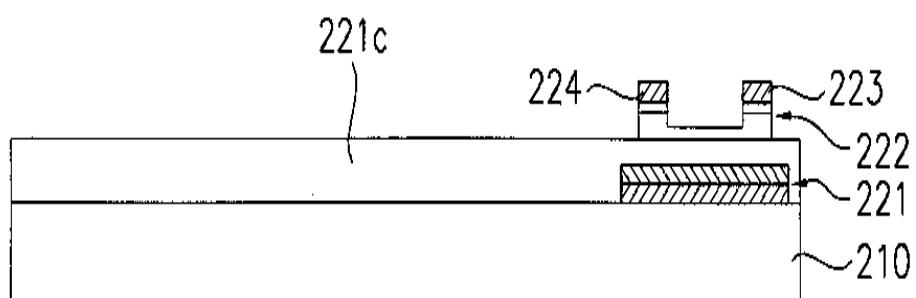
12d



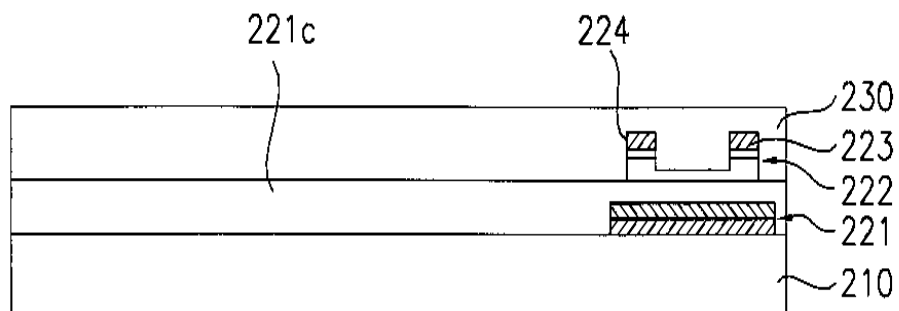
12e



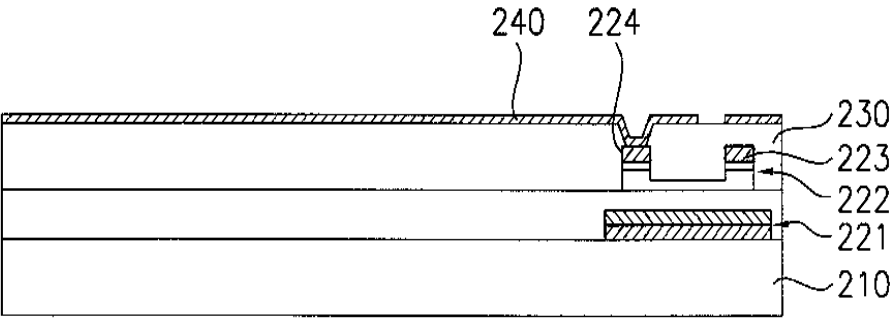
12f



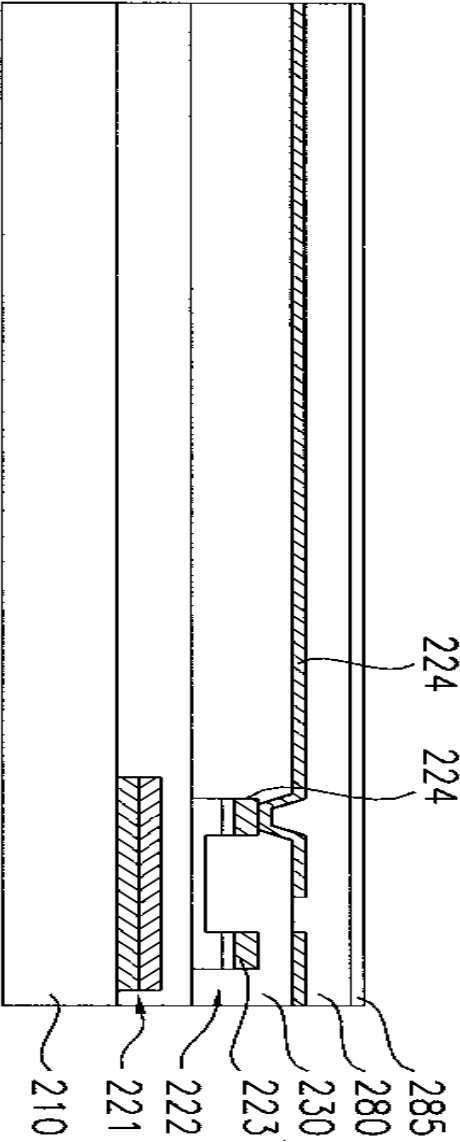
12g



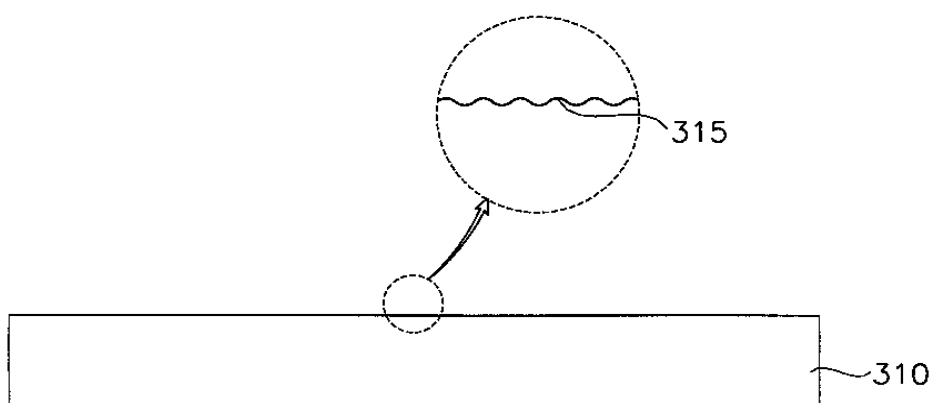
12h



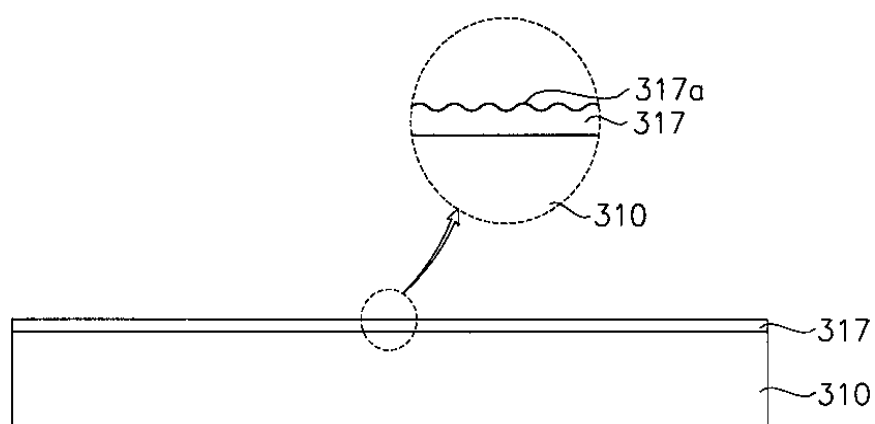
12i



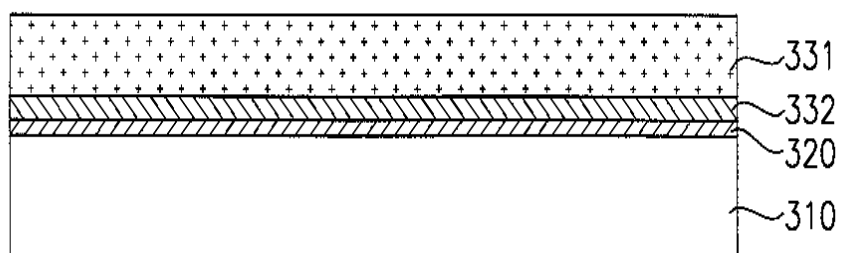
13a



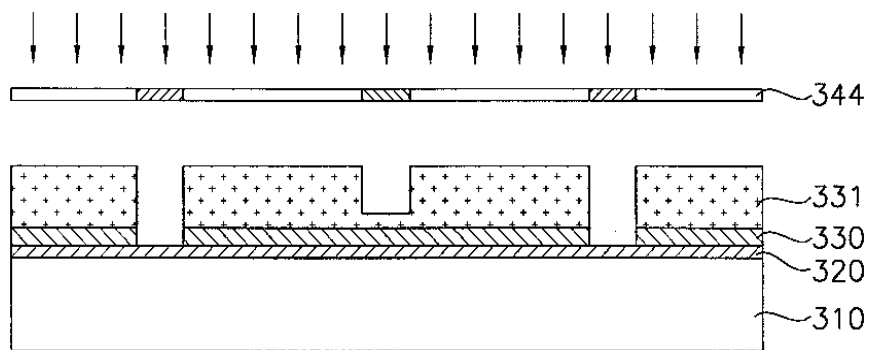
13b



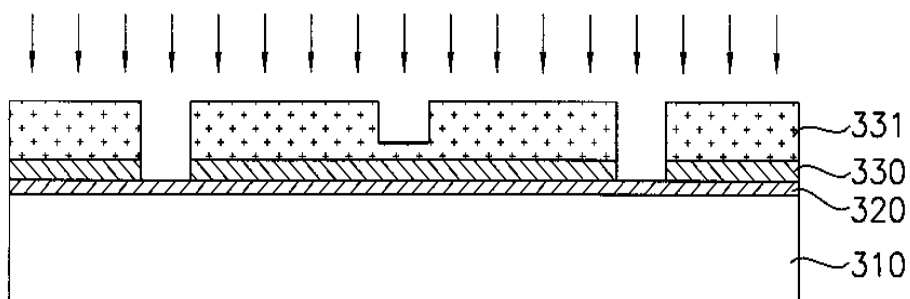
13c



13d

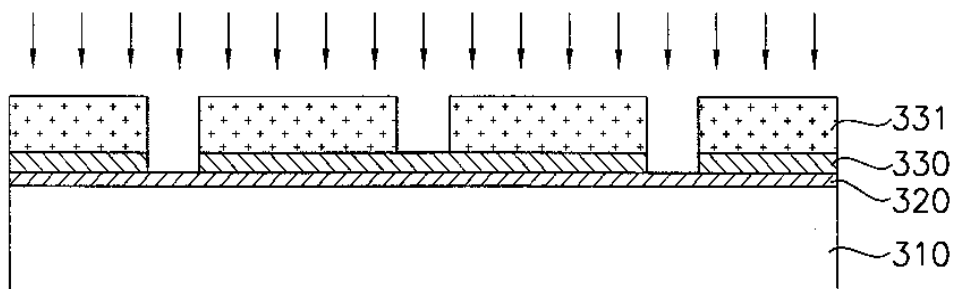


13e



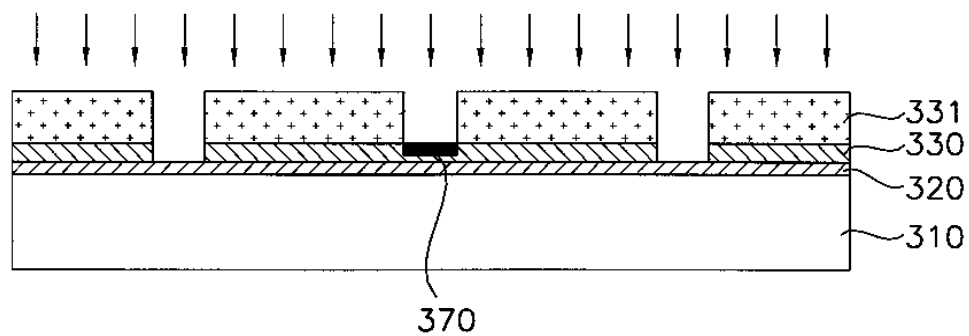
13f

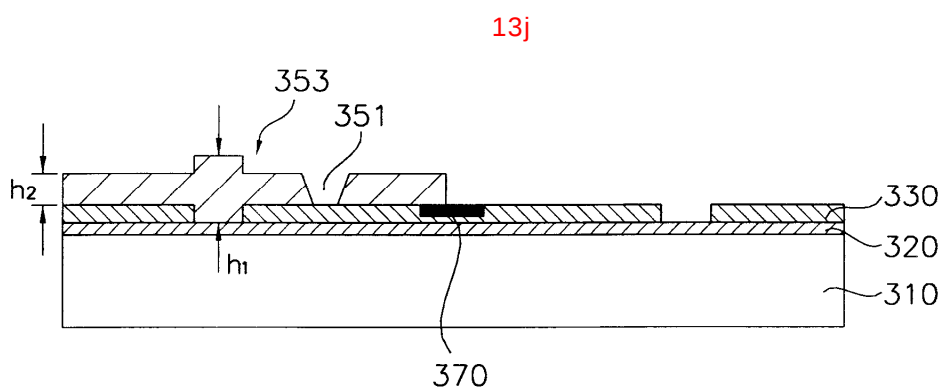
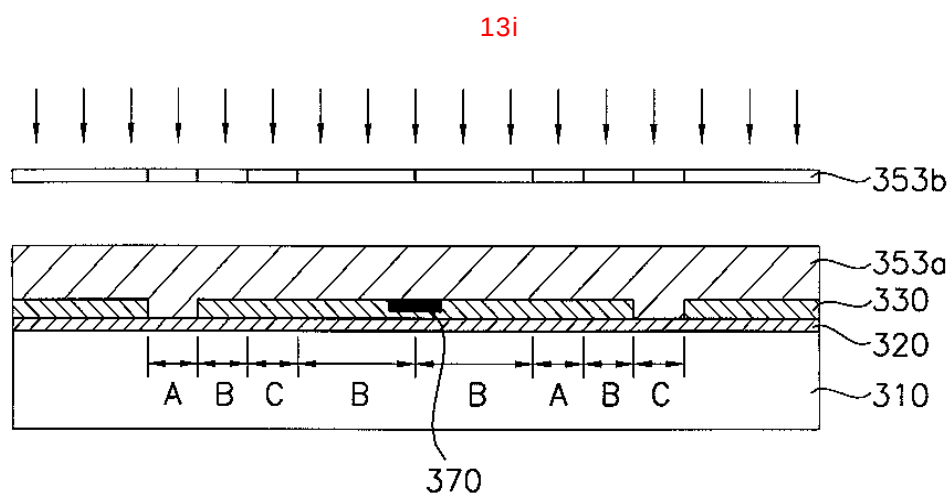
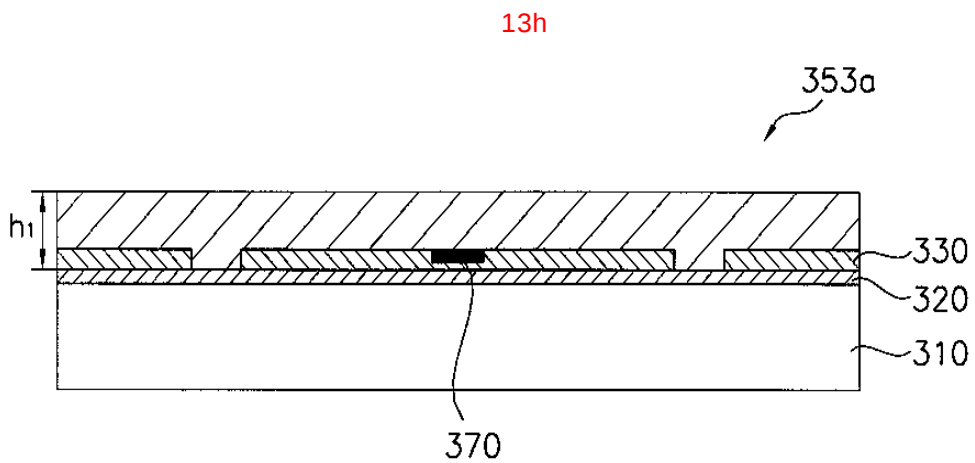
PR 에치백



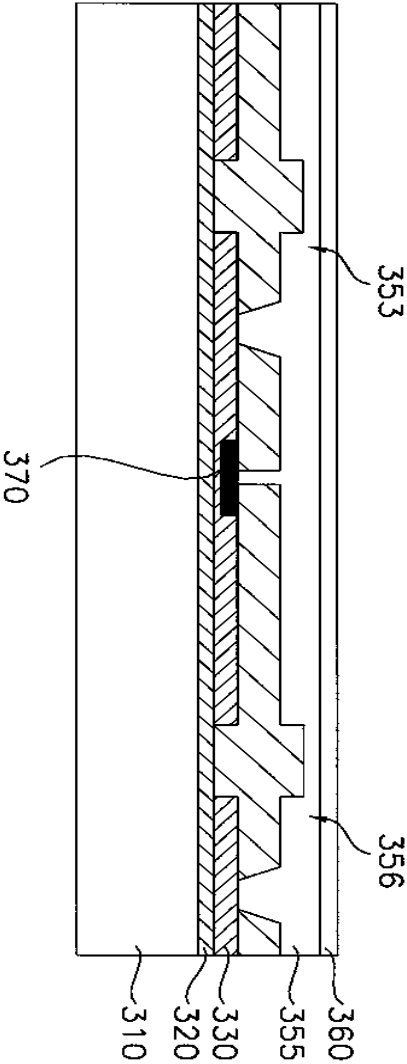
13g

케미컬





13k



专利名称(译)	反射 - 透射液晶显示装置及其制造方法		
公开(公告)号	KR1020030070758A	公开(公告)日	2003-09-02
申请号	KR1020020010282	申请日	2002-02-26
[标]申请(专利权)人(译)	三星电子株式会社		
申请(专利权)人(译)	三星电子有限公司		
当前申请(专利权)人(译)	三星电子有限公司		
[标]发明人	RHO SOOGUY 노수귀		
发明人	노수귀		
IPC分类号	G02F1/1335 G02F1/1343		
CPC分类号	G02F1/133514 G02F1/133555		
代理人(译)	PARK, YOUNG WOO		
其他公开文献	KR100858295B1		
外部链接	Espacenet		

摘要(译)

公开了透射反射型LCD及其制造方法。在滤色器基板中，光学反射/透明构件的FOV改进构件形成为使得反射或人造光是透射的外部光并且用于改善反射的视角或在光学反射/透明中透射的光成员在一起形成。在光学反射/透明构件中，为了具有相同的反射颜色或透射的光，优化了滤色器的厚度。在滤色器基板的光学反射/透明构件中，在反射或透射的光通过TFT基板之后，收益于用户的眼睛并且用户识别液晶显示器中的显示图像。因此，它具有更宽的视角范围，并且具有在均匀亮度分布中进行显示的效果。透射式LCD，滤色器和视角。

