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(43)

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(22)2002 06 24

(71)

20

(72)

501-105

(74)

:

(54)

；

(s

witching device) ；

가 , BCB(benzocyclobutene)

1 ； 1

가 2 ； 2

가

PR(photo resist)

(photolithography)

PR

7f

BCB, , PR,

1 .

2 1 A - A .

3 .

4a, 4b

1

5a

5c

2

6

BCB

7a

7f

 $\angle$ $\succ$

108 :

112 :

113 :

114 :

115 :

117 :

116 : 1

162 : 2

160 : PR 164 :

2/3

1

(17)

(5)
(5)
(5,17)

$$\begin{aligned} (17) \quad (T) \mathcal{J} \vdash & \quad (5) \\ (P) \quad & \quad , \\ (18) \quad & \quad (18) \end{aligned}$$

가

(21)

가

가

가

가

가

가

$$\begin{matrix} 2 & 1 \\ , \\ (8) \end{matrix}$$

(8) A - A

(14) (12),

(13)
(15)

(10)

$$, \quad 1 \quad (10)$$
$$\begin{array}{c} (10) \\ (13) \\ (15) \end{array} \quad (8)$$

(14)

(12)

T) (8), (12) (13) , (14) (15) (

) 가 (T) , (15) (16) (16) (

가 , (15) 가 (16) (18) .

, 2 (24) (21) , , (21)

(22a, 22b, 22c)가 (22) (23) (22)가 , (21)

(23) (18) (20) ,

(18) , (14) (17) ,

3 (L1) (

36) (34) (32) .

, (L1) α 가 30° , (Snell)

β 가 20° (L2) 가 , β 가

θ 가 $6\sim 10^\circ$ 가 (L1) (α) (γ) (L3)

가 가 , 2

, 4a 4b 1 .

, 4a (40) (42)

(43a) (cure) (melting) , 가 (embossing) 4b (42)

, (42) 가 ,

, 5a 5c 2 .

, 5a (40) 1 (53a) 2 (54) (52) 5c , 5b

1 (53a) (54) (θ) .

, 1 (53a) (54) 2 (54)

(θ) 5a 5b .

가 1 2 (53a, 54) (photo acryl)

가 ,

, PR 가 ,

가 ,

, BCB(Benzocyclobutene)

가

6 BCB

ry etching) (40) BCB A (d

(55)

가 BCB (contrast ratio)

가 BCB

(switching device) ;

가 , BCB(benzocyclobutene) (embossing pattern)

2 , 1 PR(photo resist) (photolithography)

PR

2 , ,

1, 2 (contact hole)

(Al), (Al alloy), (Ag)

1 ;

2 ;

1 ; PR BCB

1 ; PR ; 1 ;

2 PR , 1 가 2 ;

2 , 1

1, 2 PR (positive ty

pe)

-- --

7a 7f .

7a (117) (T) ,

7a , (90) (108) , (108) (1 (112) (100) (108) (113) (114) (115) , (114) (117) , (114) (115)) (113) (112) (117) (114) (115) 1 (116) (114) (115) (117) 1 (116) BCB , (spin coating) (squeeze)

7b , 1 (116) 1 (116) PR(160;photo resist) (172) (174) (170) PR(160) 가 (positive type) (negative type) , R 가 P

7c , PR(160) , 1 (116) , 1 (116) 6) PR(160) , BCB , PR(160) 1 (116)

PR(160) (116) 1

7d 1 (116) PR BCB 2 (162) (162) 1 (116) PR(160) 2

7e (T) (115) 1 2 (116, 162) (164)

7f 2 (162) 가 가 (Al) (Al alloy), (Ag) (164)

가 BCB ,

(57)

1. ;

(switching device) ;

, BCB(benzocyclobutene) 1 가

1 (embossing pattern) 가
2 ;

2 가

, 1 PR(photo resist) (photolithography)
PR

2.
1

2

3.
1 , 1, 2
(contact hole)

4.
1 (Al), (Al alloy), (Ag)

5.
1 ;
2 ;
;

BCB 1 ;

1 PR ;

PR , 1 ;

1 PR , 1 2 ;

2 , 가

.

6.

5 ,

,

.

7.

5 ,

1

, 1

.

8.

5 ,

1, 2

.

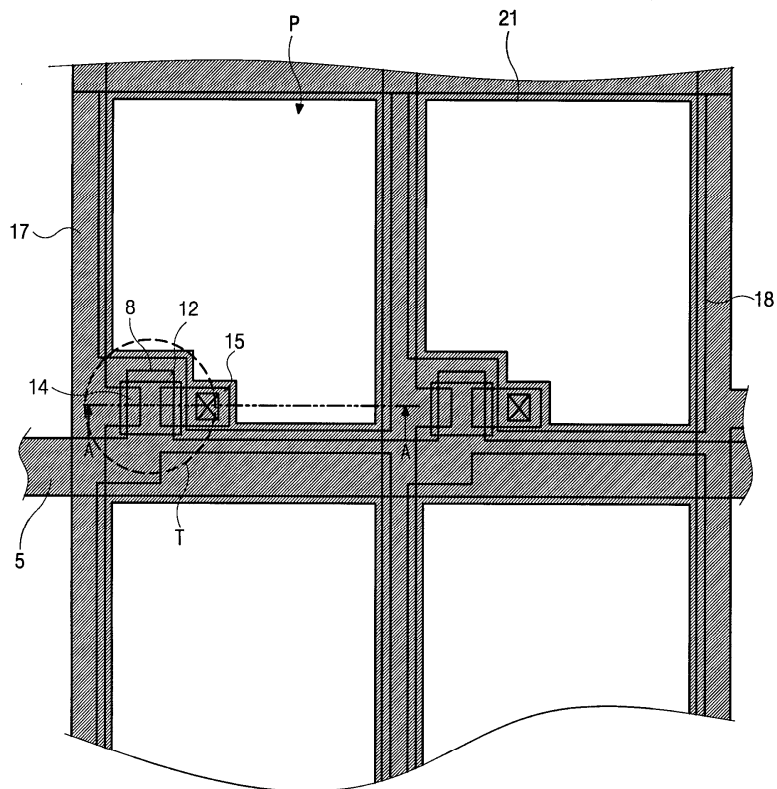
9.

5 ,

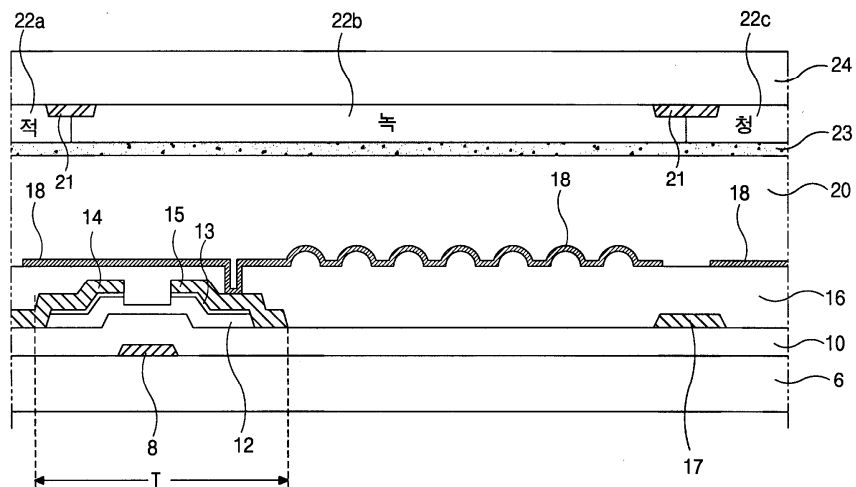
PR (positive type)

.

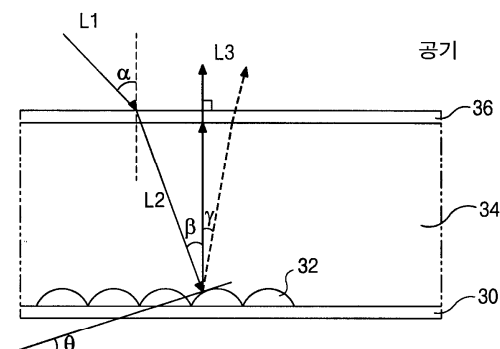
1



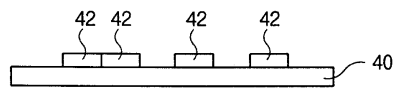
2



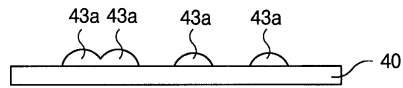
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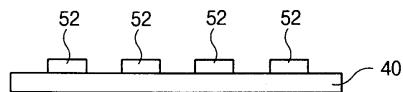
4a



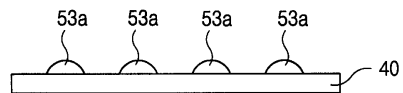
4b



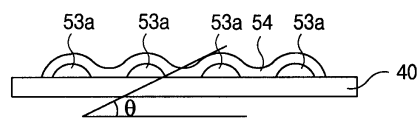
5a



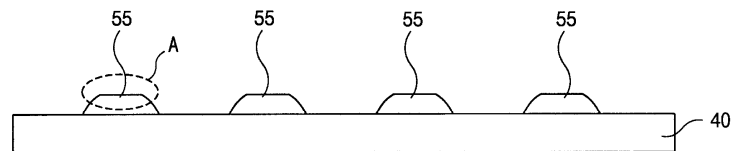
5b



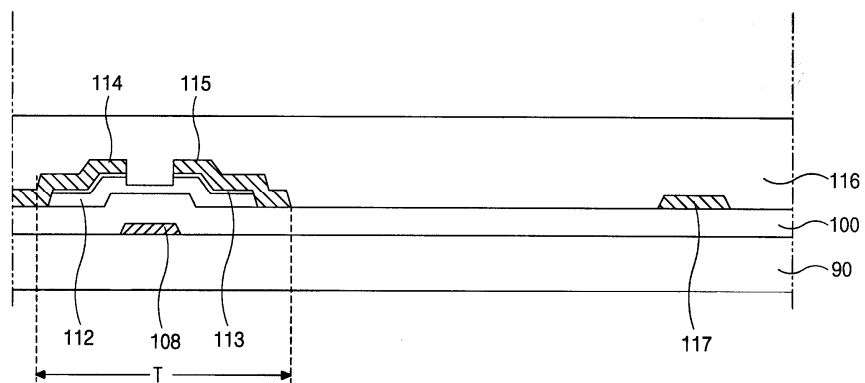
5c



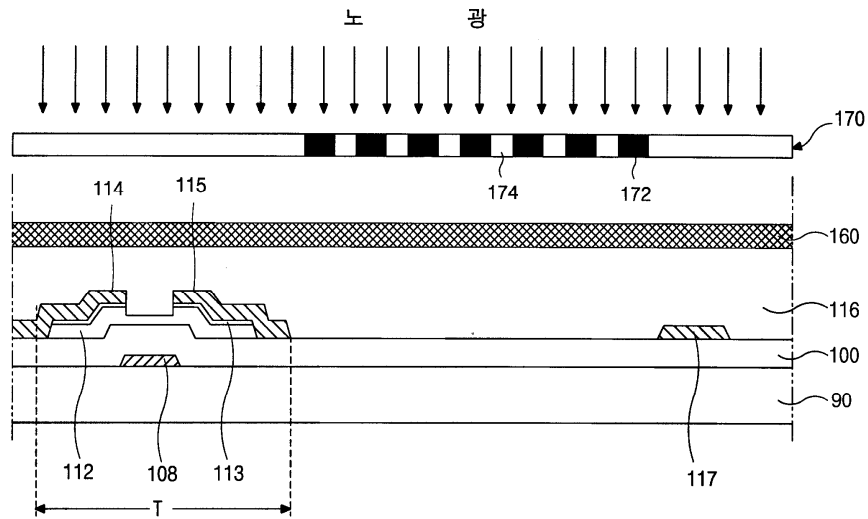
6



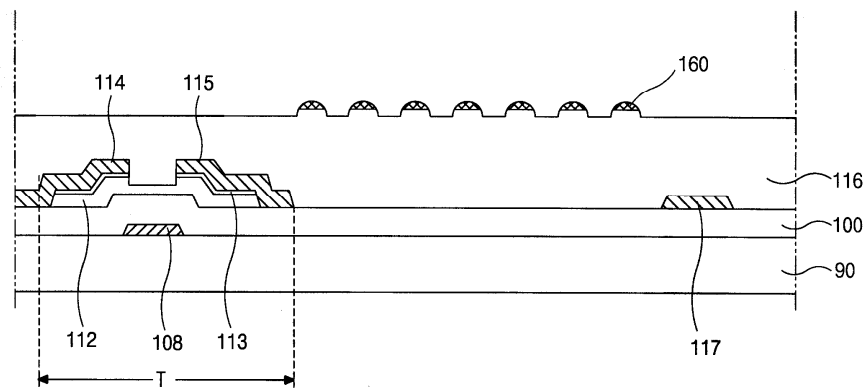
7a



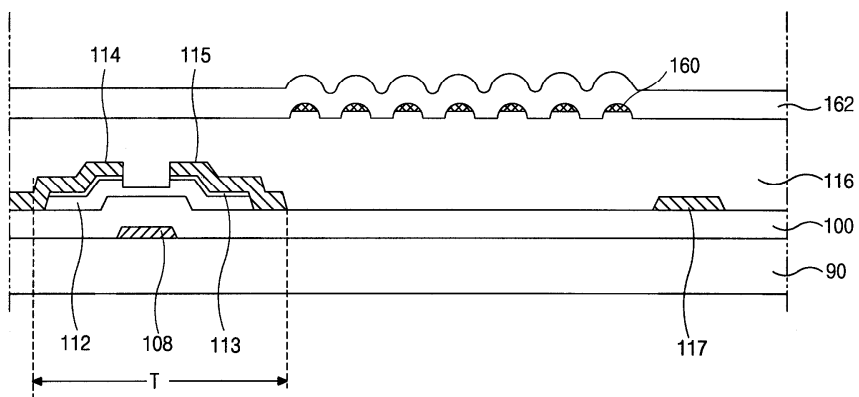
7b



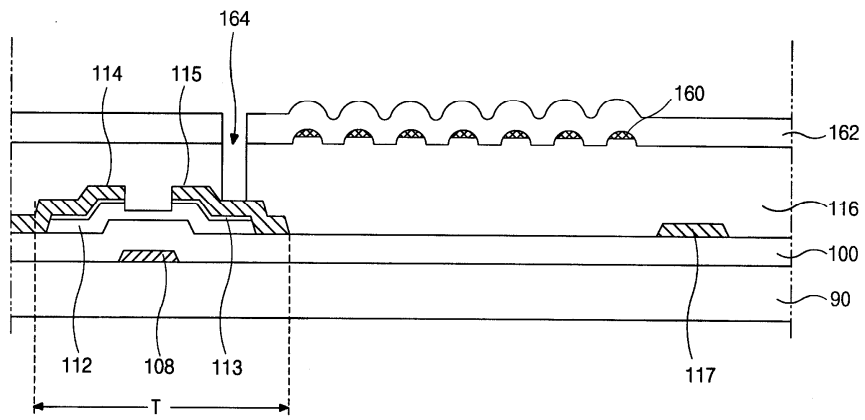
7c



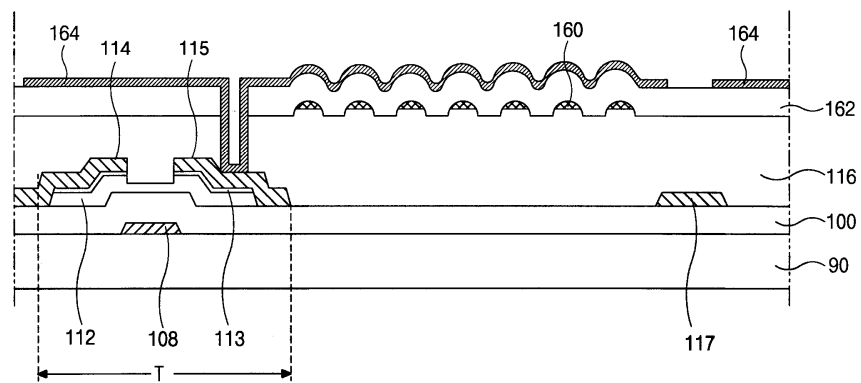
7d



7e



7f



专利名称(译)	反射型液晶显示装置及其制造方法		
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[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	LIM JOOSOO 임주수		
发明人	임주수		
IPC分类号	G02F1/1335		
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其他公开文献	KR100811646B1		
外部链接	Espacenet		

摘要(译)

根据本发明，提供一种栅极布线和数据布线，形成在基板上以便彼此交叉；栅极布线和数据布线彼此交叉的区域被定义为像素区域；开关装置形成在栅极布线和数据布线彼此交叉的点处；第一钝化层，形成在覆盖开关元件的基板的整个表面上，并且在像素区域中在上方具有半球形压花图案，并由苯并环丁烯（BCB）制成；第二钝化层，位于覆盖第一钝化层的基板的整个表面上，并具有与压花图案对应的图案结构；并且，由具有与开关元件连接的反射特性的金属材料形成的像素电极，通过使用光致抗蚀剂（PR）的光刻法形成第一钝化层的压纹图案本发明提供一种用于反射型液晶显示器的阵列基板，其包括PR作为压纹图案部分中的上层，从而在不需要单独工艺的情况下提高亮度，它可以提高竞争力。图7F 指数方面 BCB，反射器，压花结构，PR，液晶显示器

