

(19)  
(12)

(KR)  
(A)

(51) 。 Int. Cl.<sup>7</sup>  
G02F 1/1343

(11)  
(43)

10-2004-0103275  
2004 12 08

(21) 10-2003-0035257  
(22) 2003 06 02

(71) . 20

(72) 707 1701

(74)

..

(54)

9

(Common line),

1 TN

2a      2b      TN      가

3

4a      4b      /      (On/Off)

5a 5b

가

6

7 6 I-I'

8

9

10 9 ~ '

11

50 : 51 :

52 : 53 :

54 : 55 :

55a : 56 :

58 : 59 :

63a,63b : 1, 2 64 :

65 : 66 :

가 , CRT(Cathode Ray Tube) ,

panel display) 가 CRT (Flat

lectro Luminescent Display : ELD), (Liquid Crystal Display : LCD), (E  
 Plasma Display Panel : PDP) (Field Emission Display : FED), (  
 (Cost) 가 , ,  
 LCD 가 .

가

가

1 TN

1 TN (4) (8) (4, 8)

(9)

(4) (5) (1) , 가

(R.G.B) (2) , (2)

(3)

(8) (5) (10) (10)

(11) , (Pixel)(5) (6) 가 (6) , (10) (7)

(10) (11) (3) (6) - - (Indium-Tin-Oxide : ITO)

TN (6) (3) 가 (9) 가

(9)

(4) (3)

2a 2b TN 가

2a , TN 가 (9a)가 (8)

(9a) (4) (+) , (9a) (9a) 90 (Twist) , (Chiral dopant)

2b , / (4,8) (6) (3) (V) 가 ,

(9a) (9a) (Polar angle) 90 (4,8)

TN C/R(contrast ratio) 가

가

3

(20) (21) (22) (23a)

(21) (22) (24) 가 가 ,

4a 4b / (On/Off)

, 4a (21) (22) 가 , (23a)  
 (21) (22) .  
 , 4b (21) (22) 가 , (21) (22)  
 가 , (23a) .  
 , (25) (20) (23a) (20,25) ( )  
 ) .  
 , .  
 5a 5b 가  
 .  
 5a ( 4a 20 25 ) , ( (22) ) (21) 가 (23a) (22)  
 (21) .  
 , 5b (21) (22) , (21) (22) 가 (23a)  
 .  
 , 가 , / / / 70 가 가 가  
 , . ,  
 6 .  
 6 , ( ) (31) (32) , (31) (33) , (33) (32) , (32) ( )  
 34) .  
 , (36), (31) (32) (35), ( ) ,  
 / (37a,37b) (T)가 ,  
 (37b) (34) (38) .  
 , (38) (38) (34) (32) ,  
 (38) (33) (Overlap) .  
 , (T) 가  
 (34) (38) 가 .  
 .  
 7 6 l ~ l' , 8  
 .  
 , ( 6 35), ( 6 7 33) , (20) ( 6 31  
 (39) , (34) ,  
 (31) (35) (39) (32) ( 6 36)  
 ( 6 37a,37b) (38) , (38) (40) / 1  
 (42a) .  
 (20) (25) (43)  
 (42b) (41) , (41) 2  
 (20, 25) (23) .

(38) 가 (34)

(33) , 8 (31)

(33) (32) 가 (32)

(34) (32)

(25) (32) (34) 가 (34)

(43)가 (32) (34)

(32) (34) (43) (32)

가

9, 10, 9, 11, 9, (51), (51), (52), (T)가, (53), (T), (54), (51), (52), (51), (52), (54), (53), (55), (52), (51), (56), (51), (52), (55a), (56), (52), (55), (52), (50), (9, 51), (9, 54), (51), (9, 51a), (54), (54), (51), (51), (54), (58), (50), (9, 51b, 10, (58), (51), (53), (55), (51), (52), (9, 52a), (53), (52), (55), (52), (53), (50), (59), (51), (55), (54), (55a), (55a), (52), (56)가, (54), (56), (50), 1, (63a), (56), ITO, (57), (51), (52), (65), (64), (65), 2, (63b), R, G, B, (50), (52), (52), (55), (64), (52), (57), (50), (57), (66), (50), (56), 10, (56),

(52) (53) (56) ,  
 (52) (53) (56)  
 . (59) .  
 , (55) (52)  
 (51)  
 (mesh)  
 (crosstalk) .  
 11 , (54) (56)가 (mesh) (67) 가  
 , (56) (54) (52) 가  
 (55) .

가 .

(57)

1.

;

;

;

;

;

2.

1 ,

3.

1 ,

4.

1 ,

5.

1 ,

6.

;

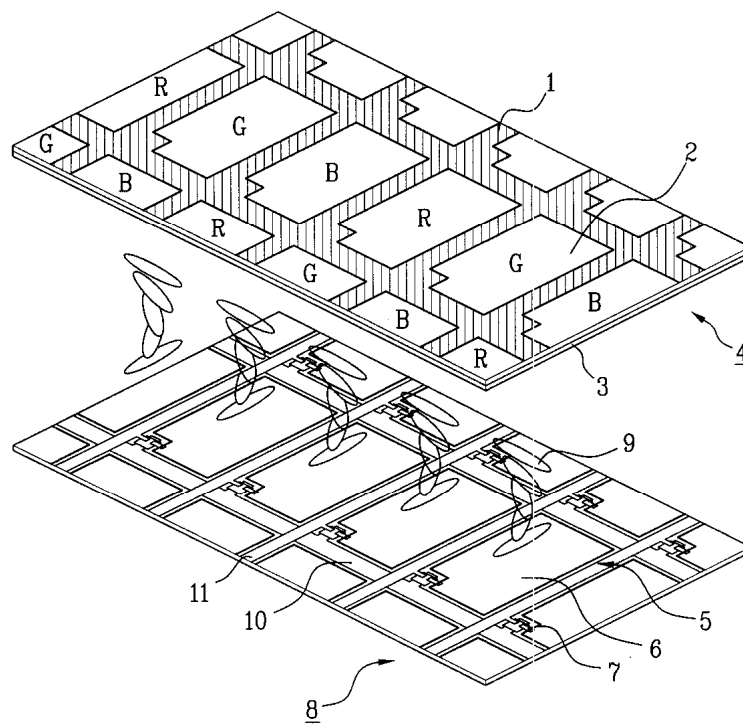
;

;

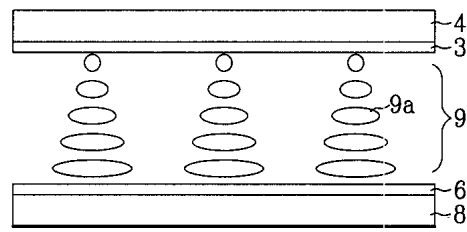
;

;

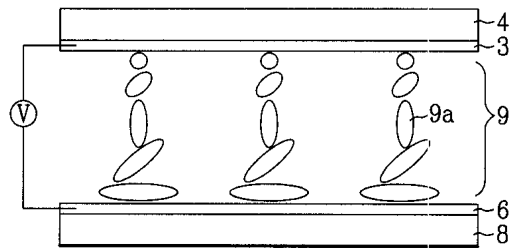
1



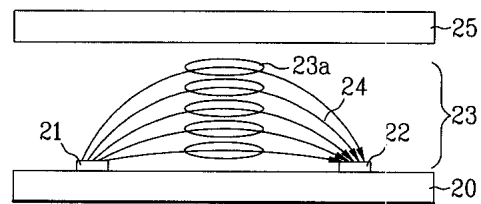
2a



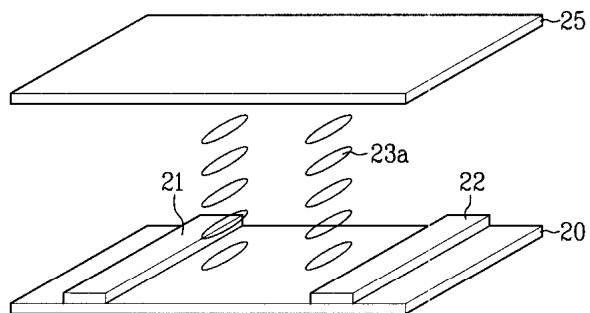
2b



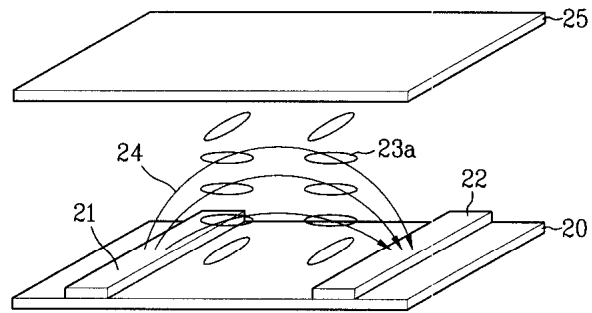
3



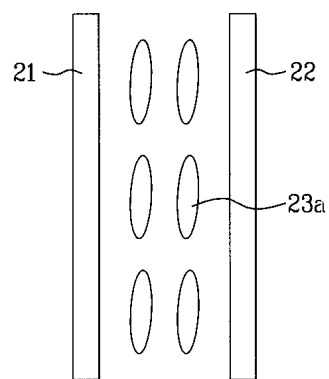
4a



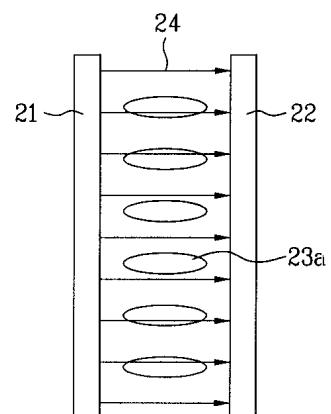
4b



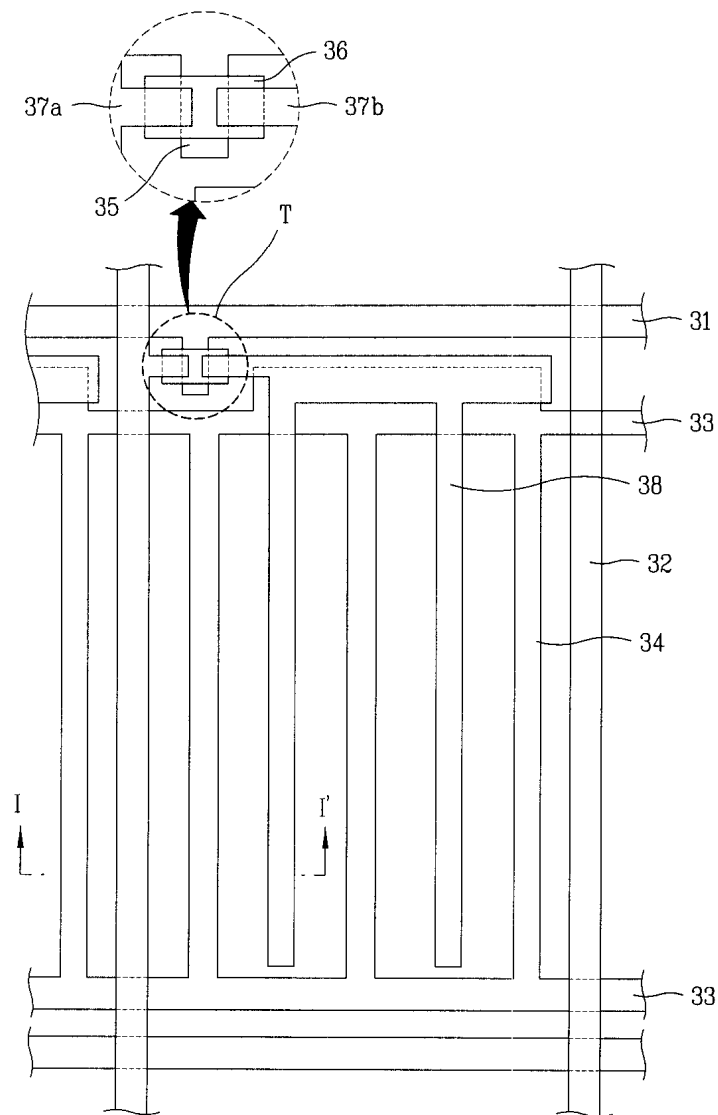
5a



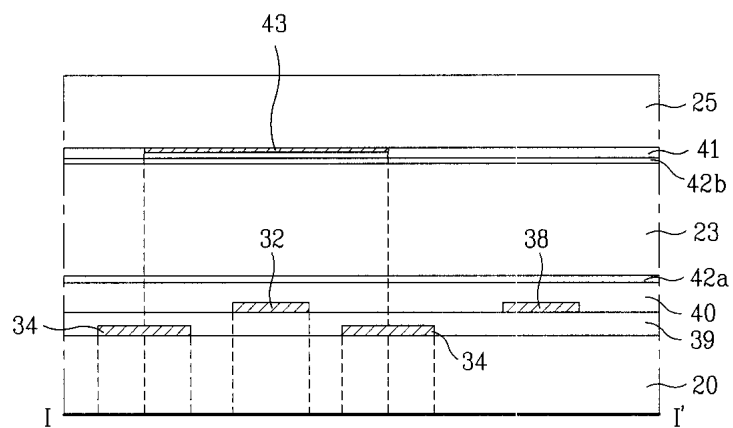
5b



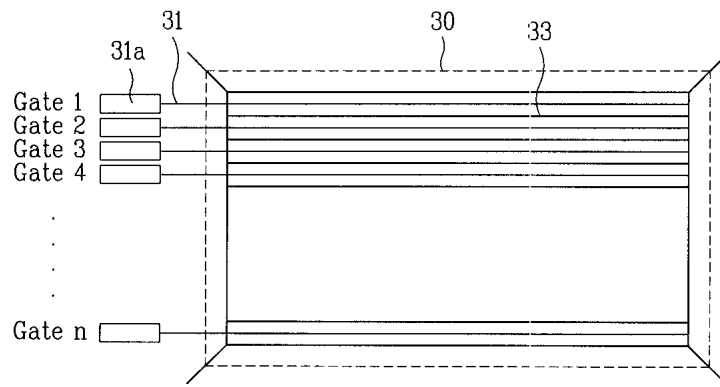
6



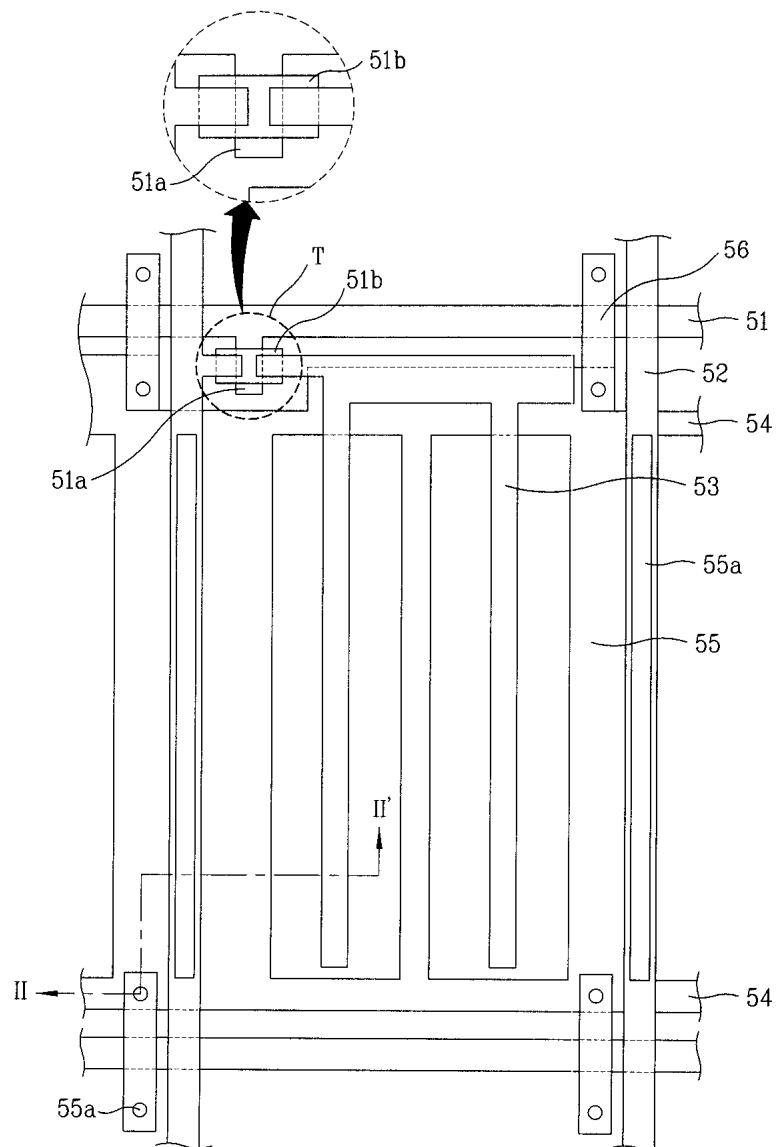
7



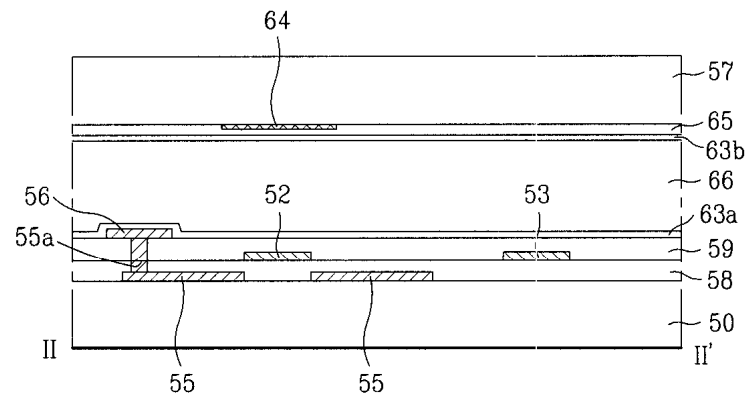
8



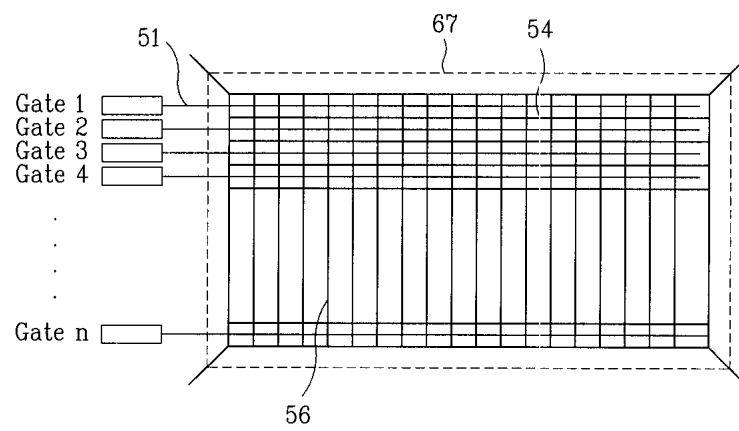
9



10



11



|                |                                                                                                                 |         |            |
|----------------|-----------------------------------------------------------------------------------------------------------------|---------|------------|
| 专利名称(译)        | 横向电场型液晶显示装置及制造方法                                                                                                |         |            |
| 公开(公告)号        | <a href="#">KR1020040103275A</a>                                                                                | 公开(公告)日 | 2004-12-08 |
| 申请号            | KR1020030035257                                                                                                 | 申请日     | 2003-06-02 |
| [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         | LEE JAEKYUN<br>이재균                                                                                              |         |            |
| 发明人            | 이재균                                                                                                             |         |            |
| IPC分类号         | G02F1/1343 G02F1/1362 G02F1/1368                                                                                |         |            |
| CPC分类号         | G02F1/134363 G02F1/136286 G02F1/1368 G02F2001/134372 G02F2201/121 G02F2201/123 A47L15/22 A47L15/421 A47L15/4214 |         |            |
| 代理人(译)         | Gimyongin<br>Simchangseop                                                                                       |         |            |
| 其他公开文献         | KR100989165B1                                                                                                   |         |            |
| 外部链接           | <a href="#">Espacenet</a>                                                                                       |         |            |

#### 摘要(译)

横向电场型液晶显示装置及其制造方法技术领域本发明涉及一种横向电场型液晶显示装置及其制造方法，其用于增大开口率并防止由于耦合现象引起的串扰。沿方向形成的栅极线和数据线，在栅极线和数据线相交的部分处形成的薄膜晶体管，平行于栅极线形成的公共线，并连接到每个像素区域的公共线 在平行于数据线的方向上形成并形成为与数据线交叠的公共电极，以及连接到薄膜晶体管的漏极并平行于每个像素区域中的公共电极之间的公共电极形成的像素电极。并且，栅极线两侧的公共电极或公共布线是电学的 进一步包括的是用于连接到彼此的公共连接线。图9 索引词 公共线，公共线连接，公共电极

