

(19)  
(12)

(KR)  
(A)

|                                             |              |                            |
|---------------------------------------------|--------------|----------------------------|
| (51) 。 Int. Cl. <sup>7</sup><br>G02F 1/1335 | (11)<br>(43) | 2003-0057208<br>2003 07 04 |
| (21) 10-2001-0087597                        |              |                            |
| (22) 2001 12 28                             |              |                            |
| (71)                                        | 20           |                            |
| (72)                                        | 2 4 404-302  |                            |
|                                             | 224 615      |                            |
| (74)                                        |              |                            |
| :                                           |              |                            |
| (54)                                        |              |                            |

가

4

1

2

3a 3e

4

5a 5f  
.  
< >  
200 : 202 :  
204a, 204b, 204c : , ,  
204 : 206 :  
210 : 212 :  
Va : Vb :  
PP :

(Liquid Crystal Display Device) ,  
.  
가 가  
가  
가  
(pixel) / 가  
가  
(cutting) (cell gap) ,  
, 1  
(10, 30) (10, 30)  
(50)  
(30) (1) (32) (32) (32)  
(34) (34) (36) (36a), (  
36b) (38, 40) (32), (36), (36a) (38, 40), (ch)  
(ch ; channel)

(T) .

2 , (32) 1 , 1

(38) (P) . ,

(44) (T) (44) 가 (42) (P)

(40) (48) .

(10) (1) (48)

(14) (14) (T)

(12)가 .

(14) (12) (50) 가

(16) .

(10, 30) (50) , (10, 30)

가 (52) .

(10, 30) (54)가 , (52)

.

(10, 30) (50)

.

가 . , .

, ( ) 가 .

2 .

(60) (70)

(60, 70) (80)

(70) (62) (64) (62) (64)

(66) (80) .

, / / /

80 ° ~ 85 ° 가 ,

.

,

,

, (column)

가 .

( 1 54) 가

(random) 가 .

,

,

, (light leakage)

.

,

가 , (ripple)

가 .

가 .

가 .

가 .

3a 3e

(IIIa) (102)가 (IIIb) 가 (1) (102) (IIIa) (104a, 104b, 104

c)가 .

(104a, 104b, 104c) (104)

(102)

(102) (104) (106) (104a, 104b, 10

4c) (PP)

(102) (carbon)

(sputtering) 가

가 , 가 가 .

(102) (102)가

(104)

3b (106) 1 (107)

1 (107) 가

3c 1 ( 3b 107) (108)

(IIIa) 가 ( ) , , ,

(108)

3d (108) 2 (109)

2 (109) 1 (107) 가

3e 2 ( 3c 109) (110)

2 ( 3c 109) 가 ( ) , ,

(110) 2 ( 3c 109) (110)

(PP) (102)



(204a, 204b, 204c)가 (204)가 (204a, 204b, 204c) (PP)

(202) (204) (206)

(206) (210) (210)

(PP) (202) (212)가 (210)

(212)

(210) (212)

2 가

5a 5f

5a (Vc) (Vd) 가 (Va) (Va)

(Vb) (200) (206)

(Vc) (Vd) (202) (202)

(204a, 204b, 204c)가 (204) (206) (204)

(204a, 204b, 204c) (PP)

(200)

가

(202)

5b 가 (negative) (206) (208) (Va) (positive) (

209)

(209)

가 (208)

5c (210) (VI) (209) (VI) 가 (210)

(209)

(212)

5d (212) 가 (208)

(plasma) (212)

(208) (212)

(212) (VIIa) (VIIb) 가 (20

8)

5e (208) , (212) (strip) (212) 가  
5f (214) , 5e (216) 가 ( 5d 208) (216) ( 5d 208)  
, (216) (PP) (202)  
, (216) (Vd) (202) , (204)  
, (216) , 가  
, TN(twisted nematic) ,

(57)

1.

1 2 ;

2

;

;

,

2.

1 ,

,

3.

1 ,

4.

1 ,

5.

1 2 ;

2

;

가 (negative) 가  
 가 (positive) 가 ;

;

, 가 ;

가 가 ,

.

6.

5 ,

,

.

7.

5 ,

,

,

, ,

.

8.

7 ,

, ,

,

가 ,

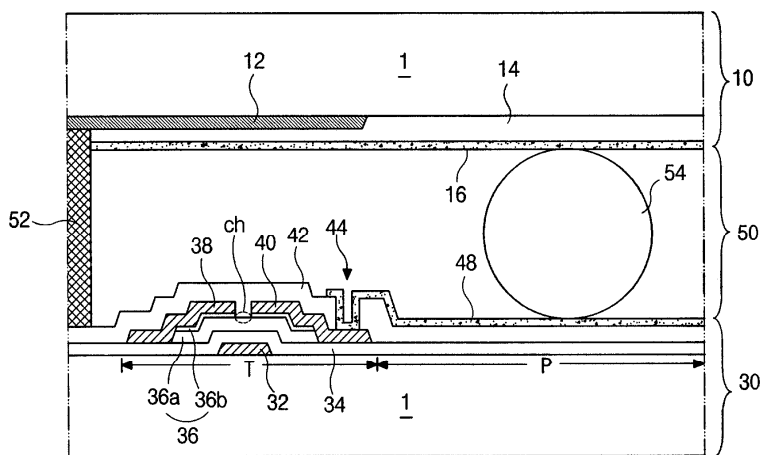
.

9.

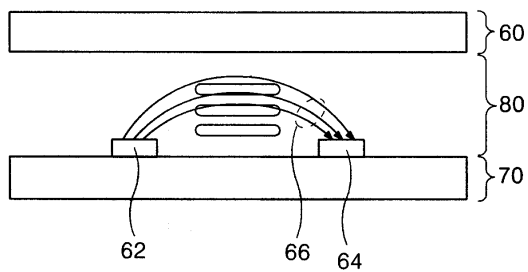
5 ,

.

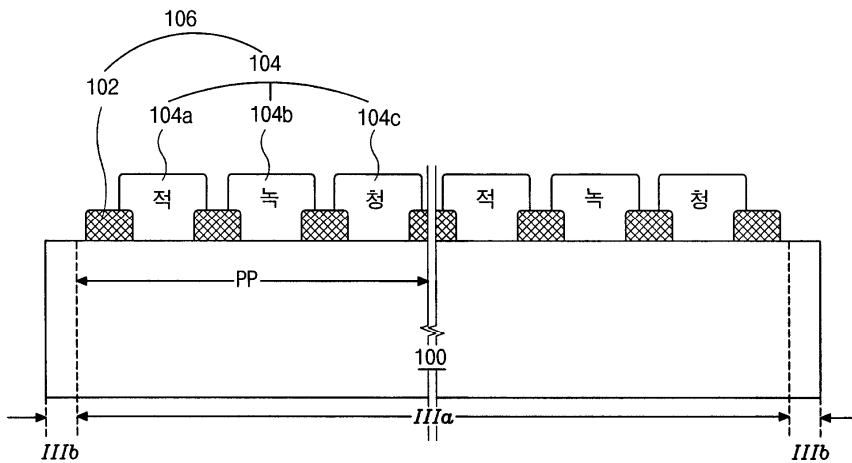
1



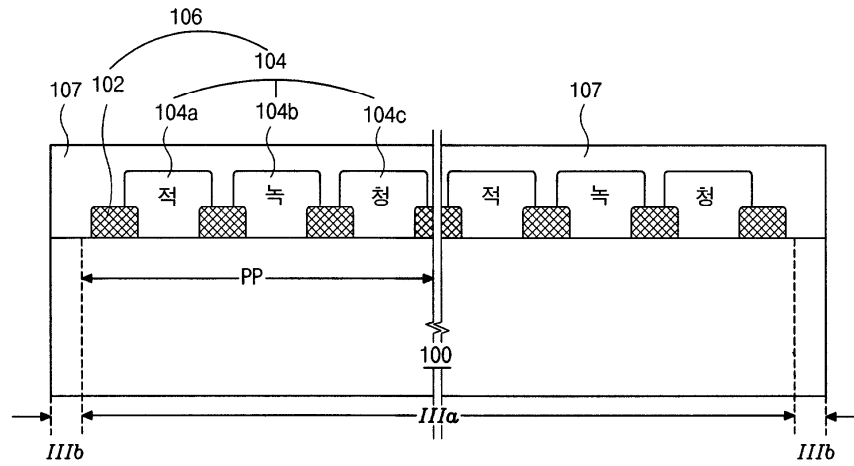
2



3a

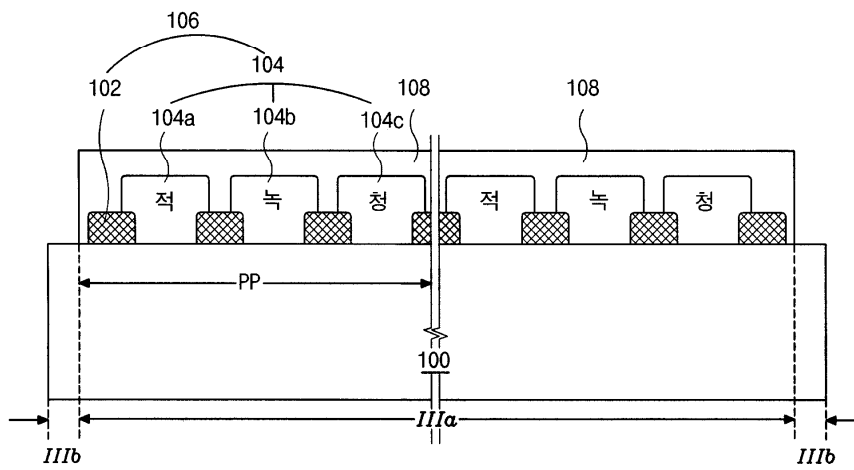


3b

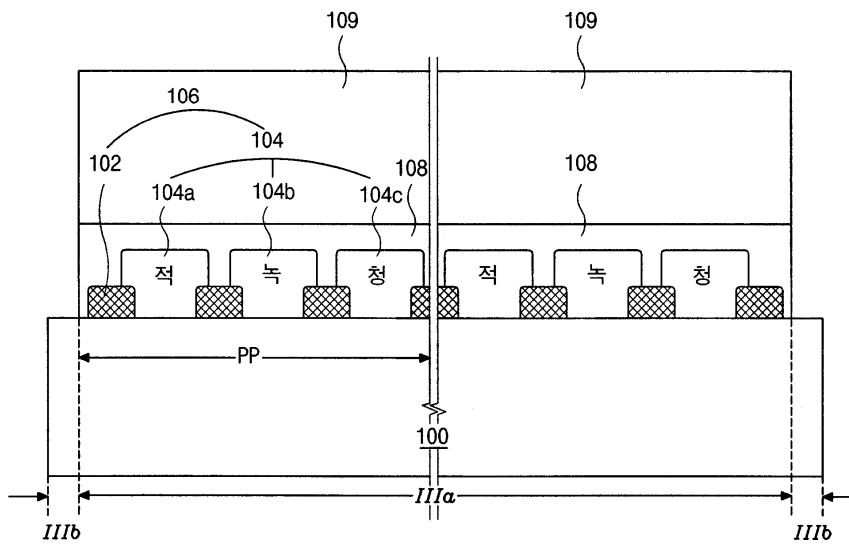


3c

사진 식각 처리

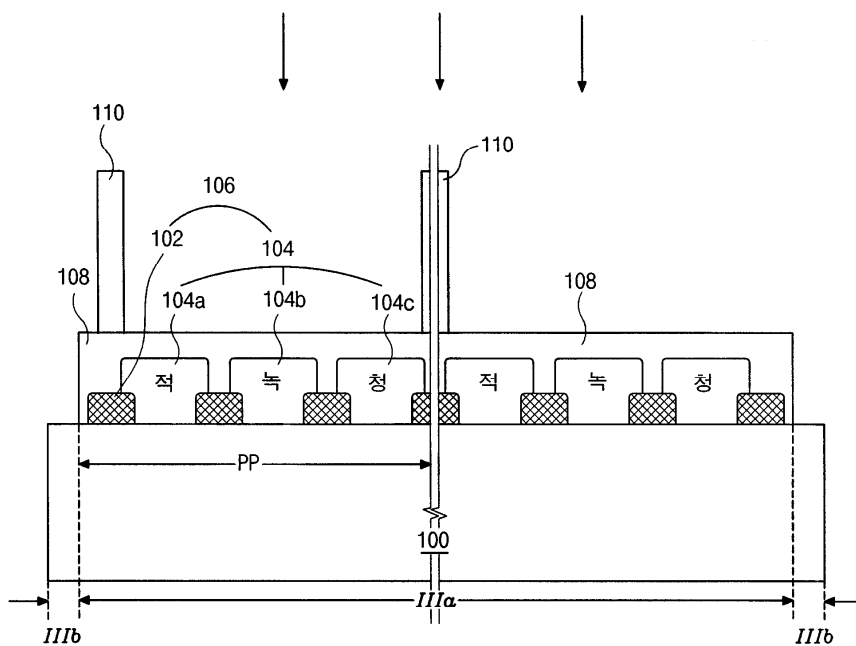


3d

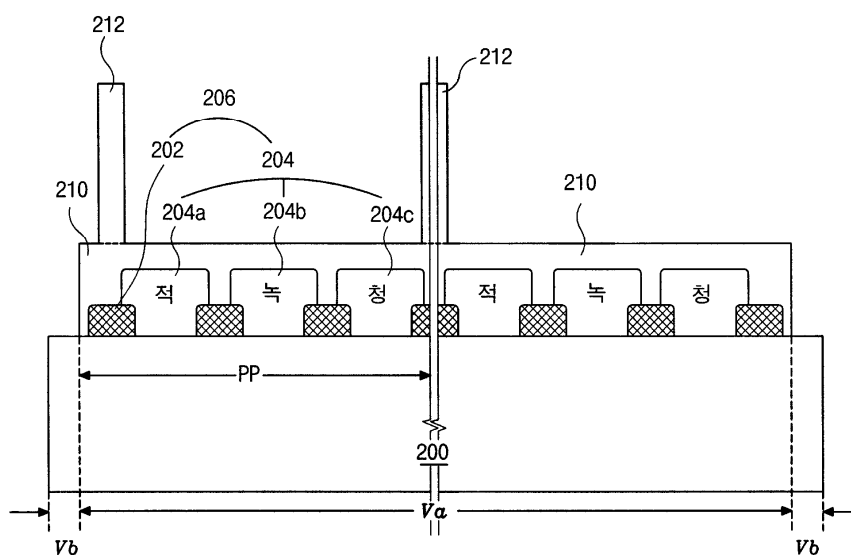


3e

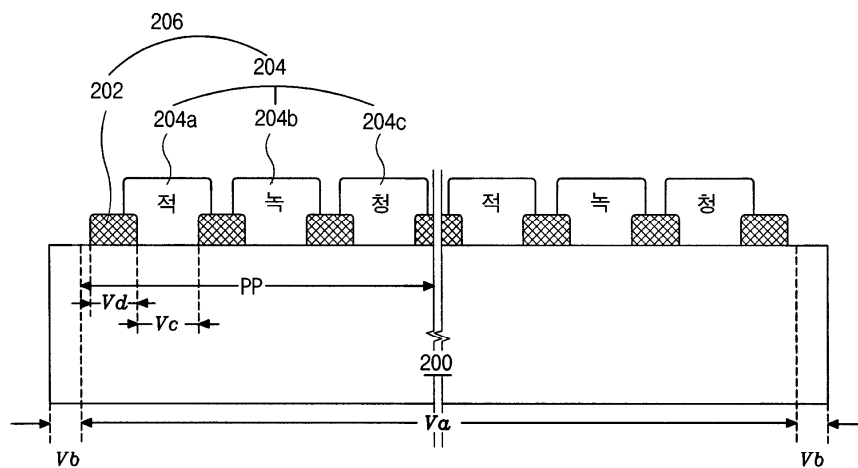
사 진 식 각 처 리



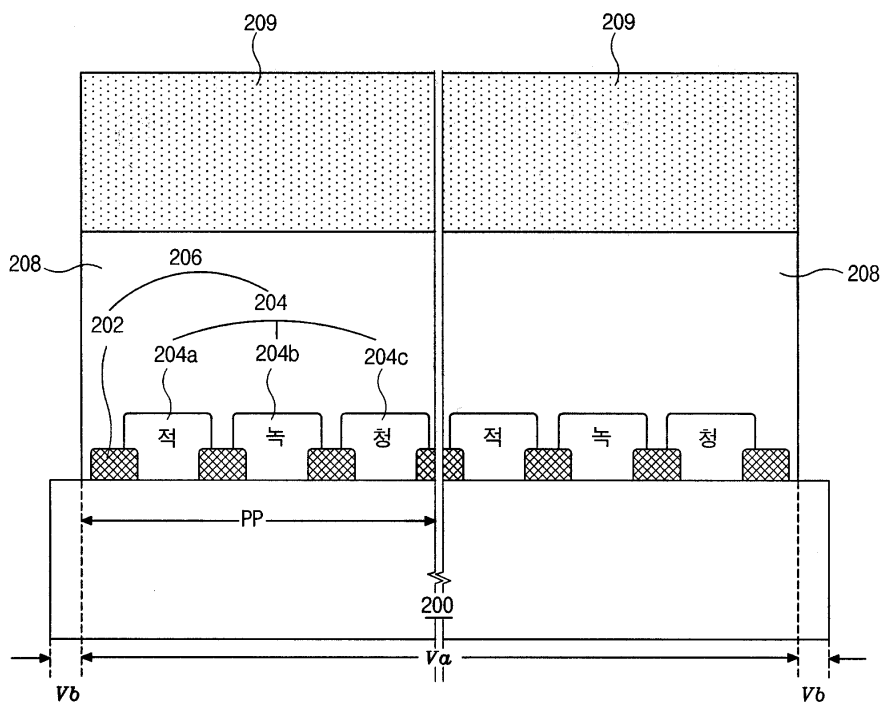
4

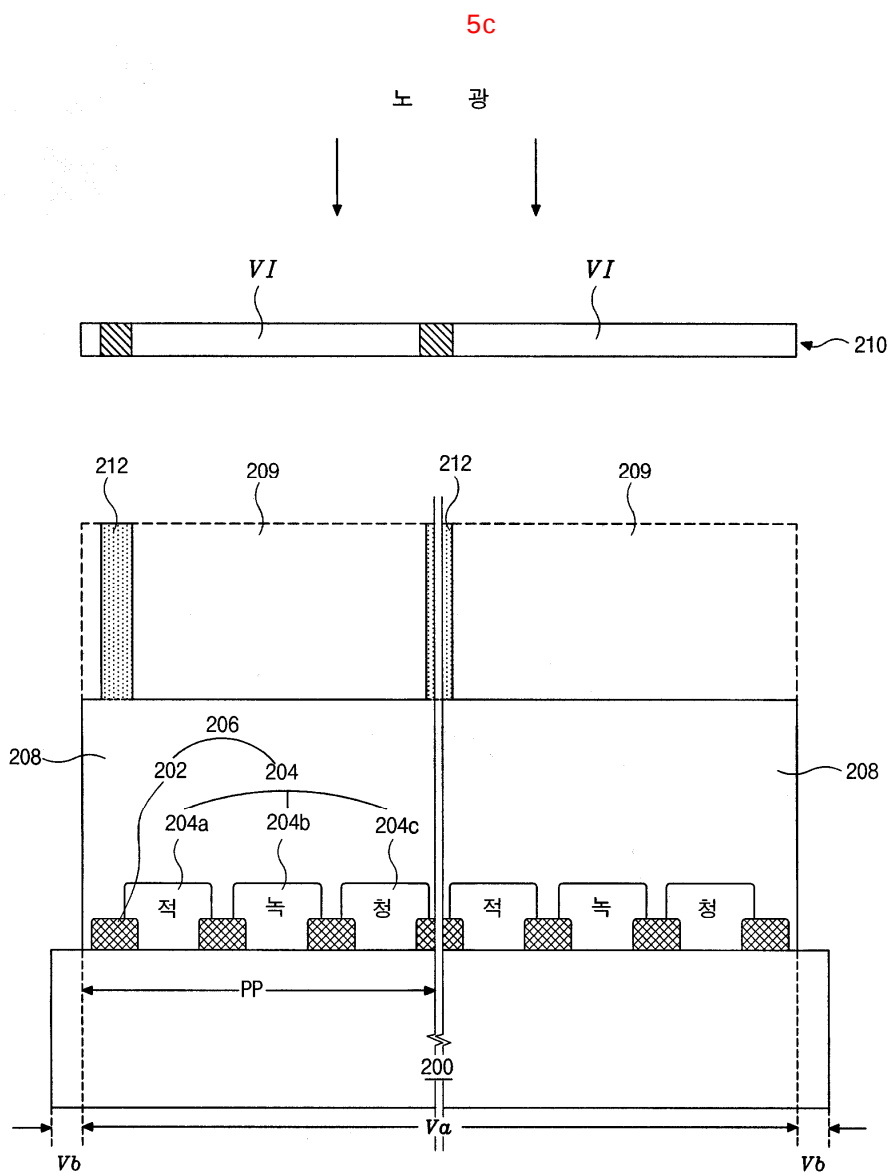


5a



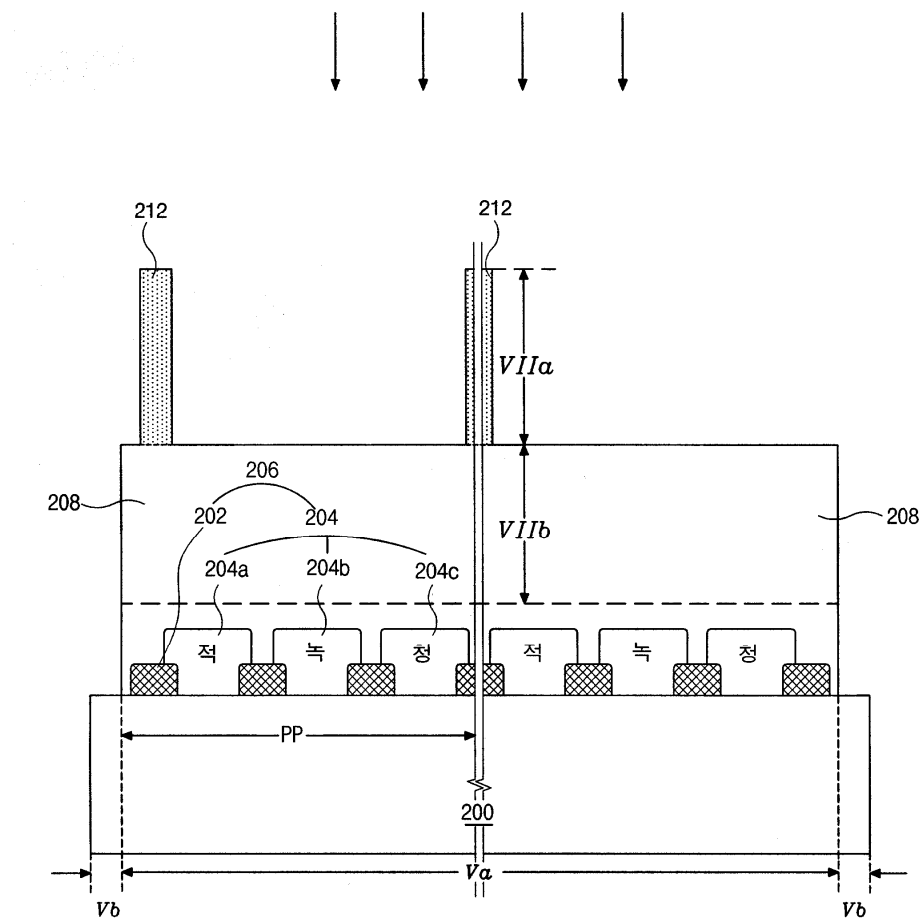
5b



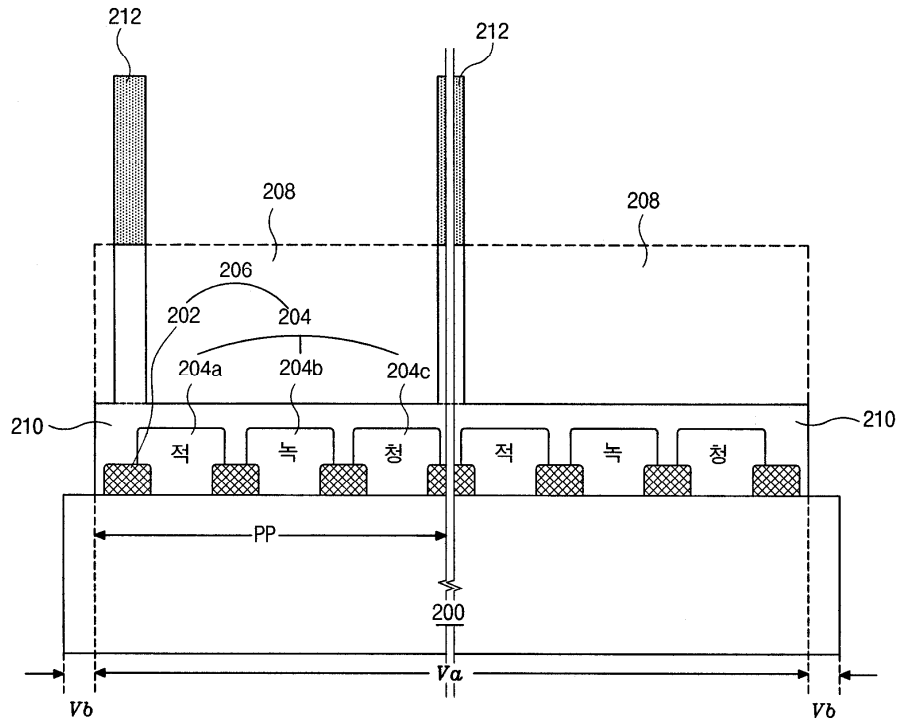


5d

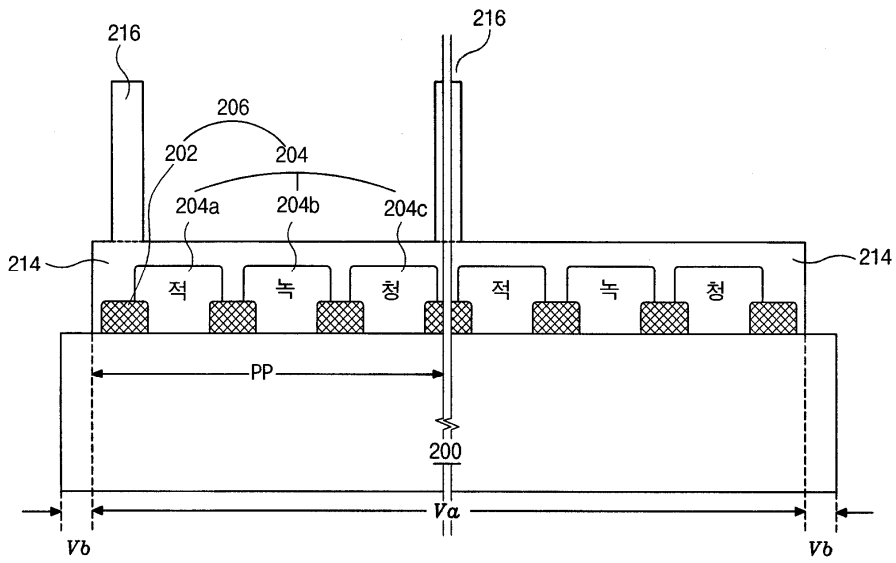
건 식 식 각



5e



5f



|                |                                        |         |            |
|----------------|----------------------------------------|---------|------------|
| 专利名称(译)        | 用于液晶显示装置的滤色器基板及其制造方法                   |         |            |
| 公开(公告)号        | <a href="#">KR1020030057208A</a>       | 公开(公告)日 | 2003-07-04 |
| 申请号            | KR1020010087597                        | 申请日     | 2001-12-28 |
| [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         | CHO WONHO<br>조원호<br>LEE GYUHYUN<br>이규현 |         |            |
| 发明人            | 조원호<br>이규현                             |         |            |
| IPC分类号         | G02F1/1335                             |         |            |
| 其他公开文献         | KR100835170B1                          |         |            |
| 外部链接           | <a href="#">Espacenet</a>              |         |            |

#### 摘要(译)

用途：提供一种用于LCD（液晶显示器）器件的滤色器面板及其制造方法，通过同时形成外涂层和柱间隔物而无需光刻工艺来节省时间和成本。组成：在像素区域中形成由红色，绿色和蓝色滤色器（204a，204b，204c）组成的滤色器（204）。对应于红色，绿色和蓝色滤色器之一的区域被定义为彩色像素区域（PP）。在滤色器中形成滤色器层（206）。在滤色器层上形成外涂层（210）。柱状衬垫料（212）形成在对应于黑色矩阵的位置。外涂层和柱状衬垫料由一种材料整体形成。特别地，外涂层和柱状衬垫料通过干法蚀刻形成而无需光刻。

