

(19) (KR)
(12) (B1)

(51) 。 Int. Cl.⁷
G02F 1/1335

(45)
(11)
(24)

2004 05 10
10-0430804
2004 04 28

(21) 10-2001-0070902
(22) 2001 11 15

(65)
(43)

10-2003-0040573
2003 05 23

(73) .
20

(72) 2 930-43

104-1002

(74)

⋮

(54)

, 1

2

⋮
⋮
⋮
⋮

⋮

,

,

,

,

,

,

.

8

1

2a, 2b

3

4

2

2

가

5a, 5b		
.		
6	5a	
7a, 7b		5b
8		1
9	8	IV - IV
10		2
11		3
<		>
102 :	104 :	
105 :	106 :	
108 :	110 :	
112 :	120 :	

가

가

(Thin Film Transistor ; TFT)가

가

(AM -LCD ; Active Matrix Liquid Crystal Display

가

1

(10, 30)

(10, 30)

(50)

(30)

(32, 34)

(32, 34)

(32, 34)

(P)

(T)가

(T)

(46)

(10)

(12),

(12)

(16)

(10, 30)

(54)

(back light)가

(52, 54)

(Aperture Ratio)

가

가

2a, 2b

2a

(31)

(36a),

(33)

(36b)

(30)

(1)

(33)

(31)

(36)

(31)

(36)

(38, 40)

(36a)

(38, 40),

(ch)

(ch ; channel)

(T)

(44)

가

(42)

(46)

(48)

(46)

(50)

(40)

(44)

(42)

(1

(42)

P)

(10) (1) (14) (13) (13) (16), (14)가 (18)
(30) (36) 가 (a-Si)
(14) (T)
(34) 2b (30) (10) (46)
(46) (46) (± 5μm) (46)
가 (14)가 (10, 30) (± 5μm)
(14) (46)
(34) (46) (34)
(mono domain)
가
90 °
TN(twisted nematic)
3 2
(normally white mode) TN 가
가 45 °, 135 °
(normally black mode) 가
가 'IIIa' 'IIIb'
가
(reverse tilt domain) 'IIIa'
2 1 2
(disclination line) 'IIIb'
가 가
4 2 3
가 (60) (60)
2 (62)
(64) 1 (64) (IVa) 1
2 'IVa', 'IVb' (66)
'IVb' 1 (64) (stripe) 'IVa'
가

[illegible]

가

1, 2

1, 2 TN(Twisted Nematic), ECB(Electrically Controlled Birefringence) (normally white mode)

2, 1; 1 1; 2

가 가

가

가

2 $2\ \mu\text{m} \sim 8\ \mu\text{m}$

< 1> 1 8

(110) 1 (104) (104, 110) (104) 2 (T)가 (T)

(112) (T) (104) (102) (102) (112) (105) (110) (106) (106) (104, 110) (112)

(T) (108) (120) (112) (104, 110) (112)

(T) (120) (110) (VII

a, VIIb) 가 'VIIc' (VII

6, 7a, 7b (112) (120) (112) (110)

(120) 가 (112) 가

9 (130, 150) (170) (130, 150) (150) (110) (130)

(112) (120)가 (112) (120) (110) (112)

가 (120) 'VIIc' (112)

가 93×279 μm 1% 가

1 μm TN, ECB(Electrically Controlled Birefringence)

nce) ECB OCB(Optically Compensated Birefringence)

(120)가 (120)

$\langle 2 \rangle$
 10^2 , 2^2
 (202) , (202)
 (204) , (204)
 $1, 2$ 가

 1
(depolymerization)
 2
(isomerization), (decomposition), (dimerization),
 (206) , $1, 2$ 가 2 , (206)
 (208)
 (202)
 (206) 가
 (204) 가
 (208) 가
 (208)
 $\langle 3 \rangle$
 3^2 , 2^2
 11 , 3
 2
가 (302) (304) (d)
 (302) (304)
가 'XIa', 'XIb' (302) 가 1 (306) 1
 (306) (308) 가
 $1, 2$ (304) (302) (302) (XIc)
 (306)
 3
 2
 (302) (304)
 $1 : 1$
가

(57)

1. 1 2 ; ; , 가 ; 2 ; ; , 가 ; 1, 2 ; 1, 2 ; 가 ;
2. 1 , , .
3. 2 , .
4. 2 , 1, 2 .
5. 4 , TN(Twisted Nematic), ECB(Electrically Controlled Birefringence) (normally white mode) .
6. 1 ; 1 1 2 ; ; ; , 가 가 ; 1, 2 , 가 ; 1, 2 , 가 , .
7. 6 , .
8. 6 , .
9. 6 , 2 .
10. 1 6 , .

1, 2

가 , 1, 2

$2\ \mu\text{m} \sim 8\ \mu\text{m}$

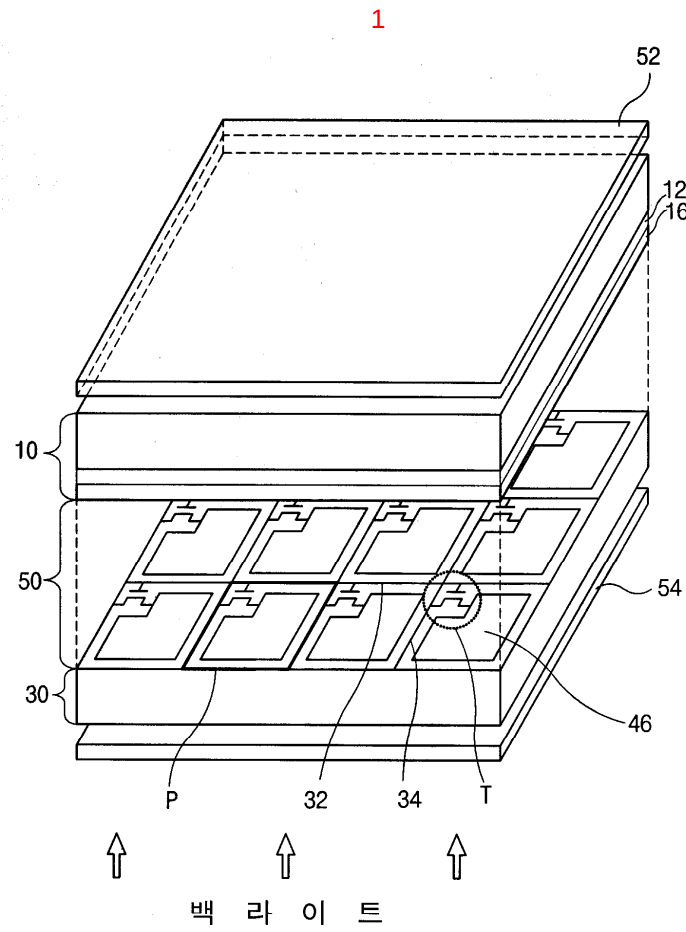
11.

6

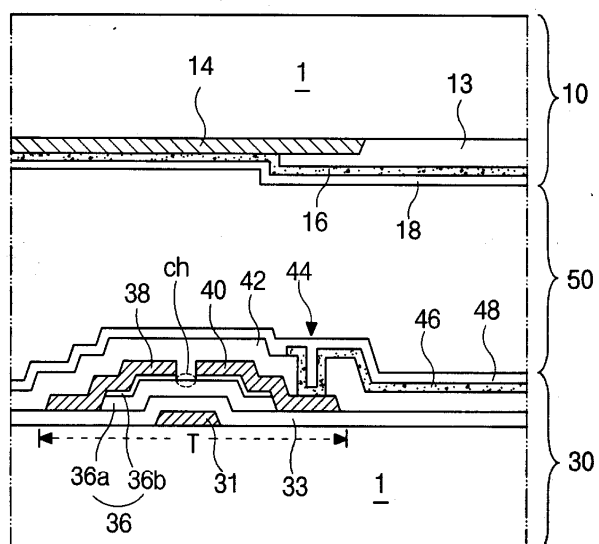
2

12.

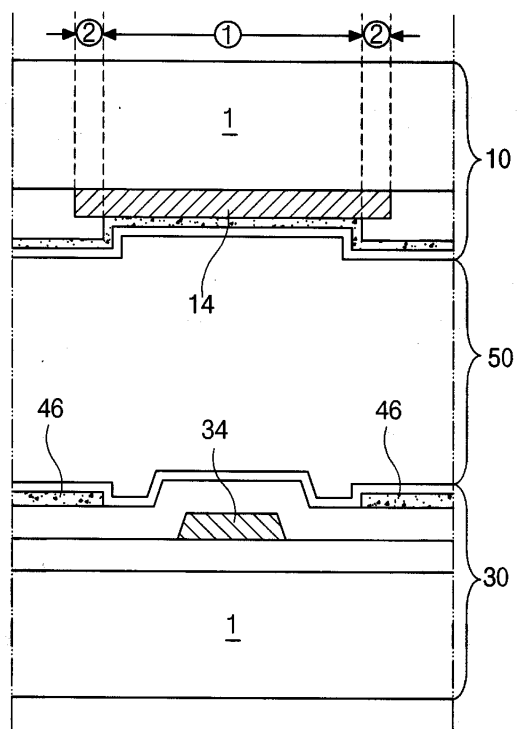
1

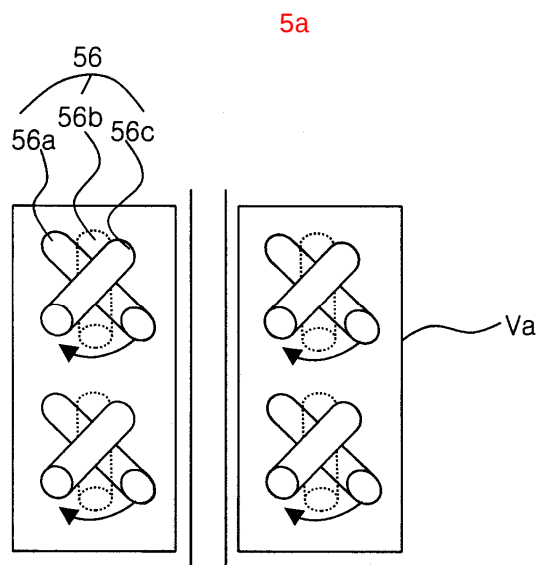
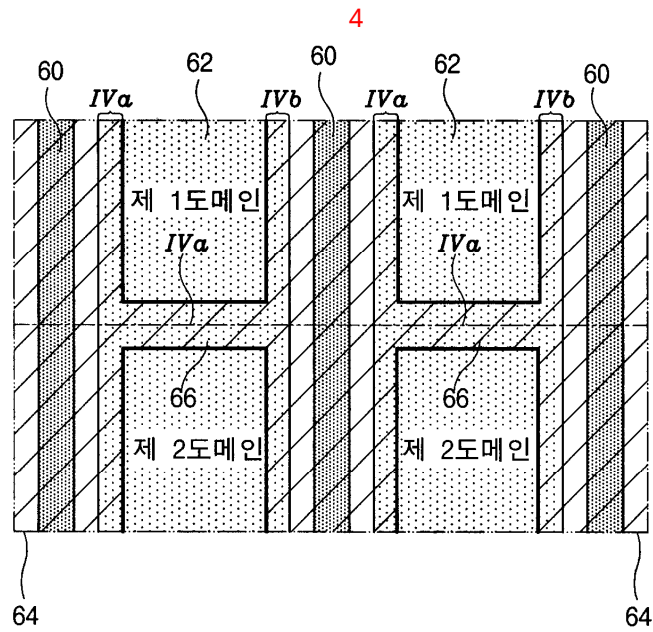
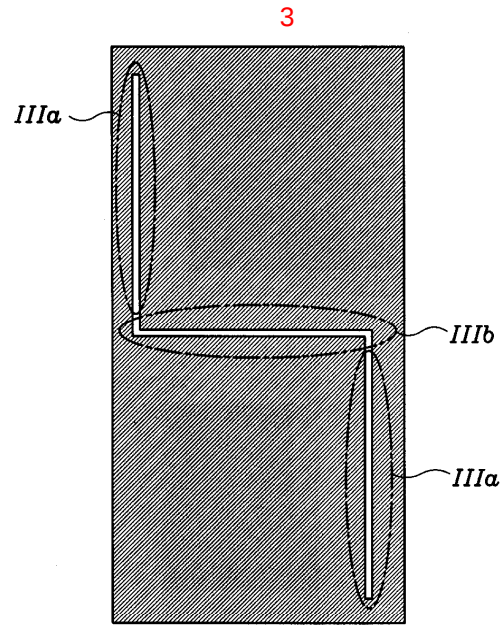


2a

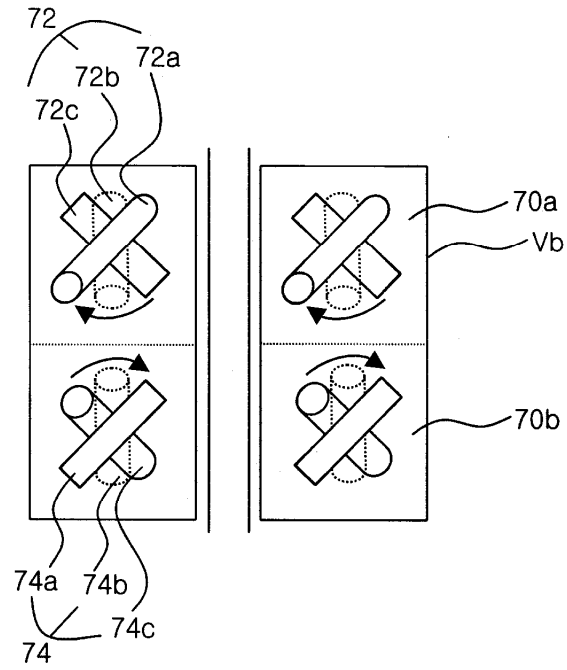


2b

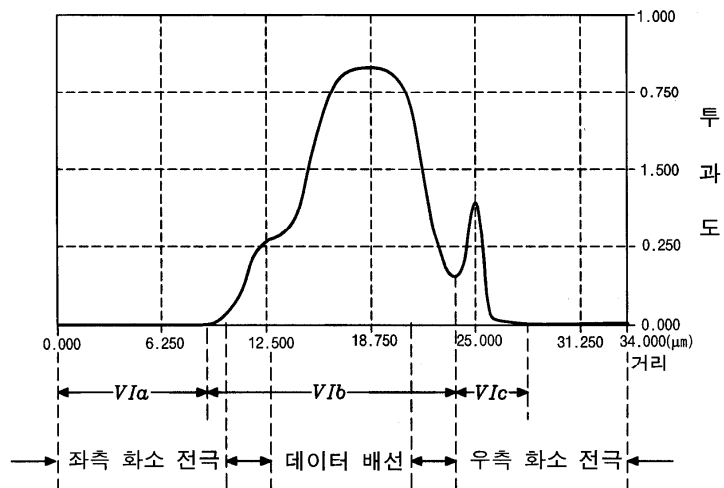




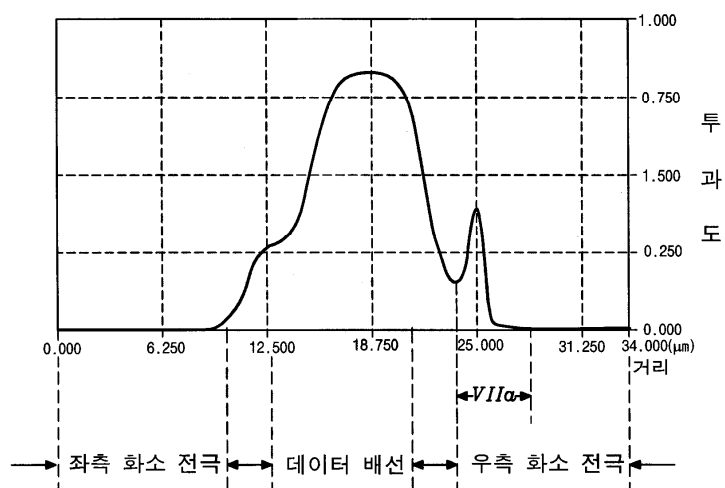
5b



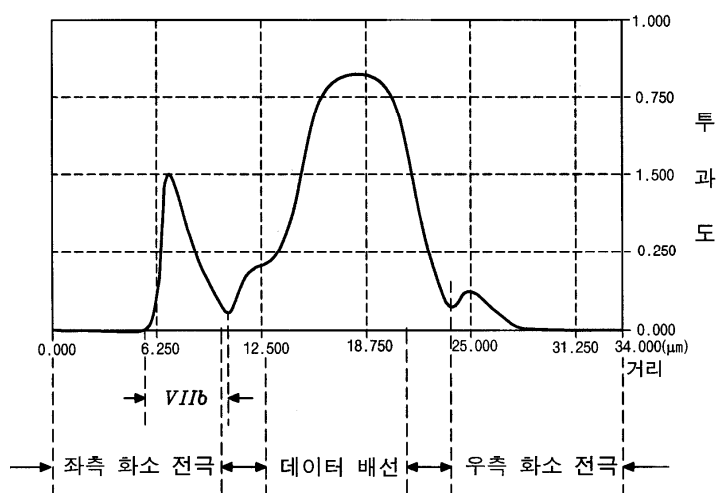
6

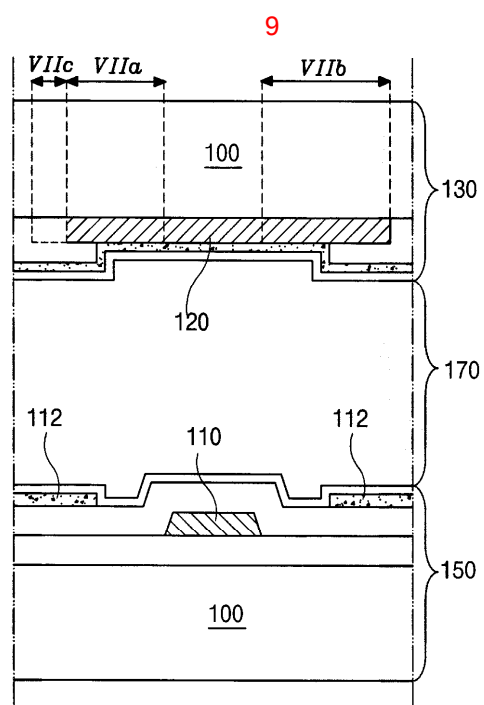
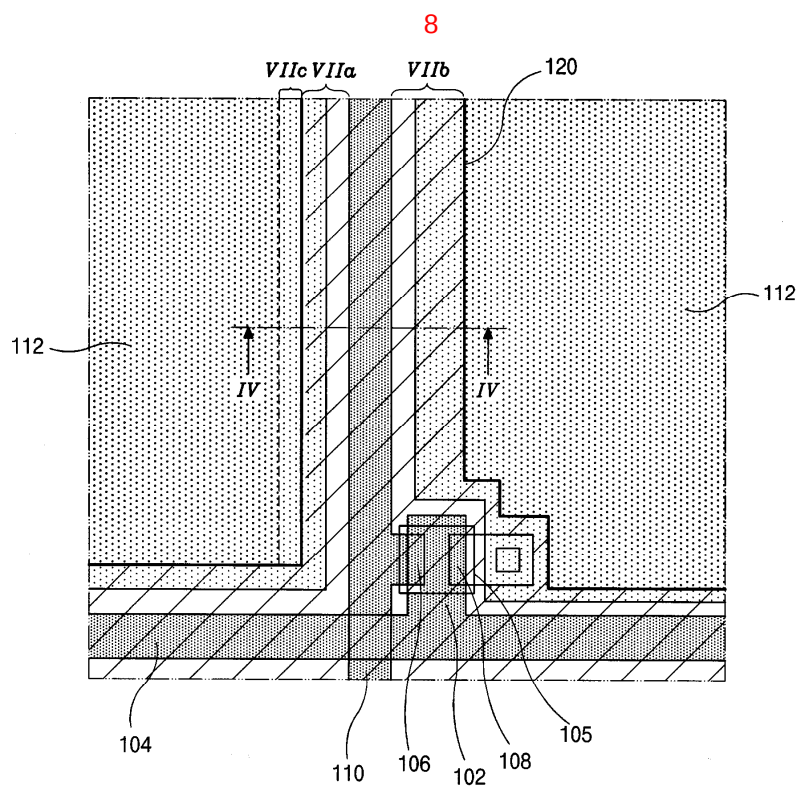


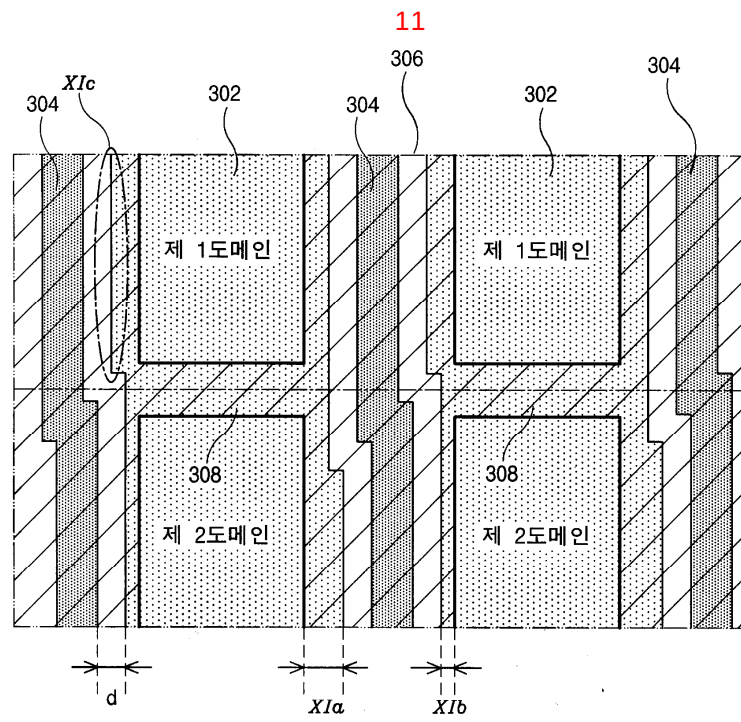
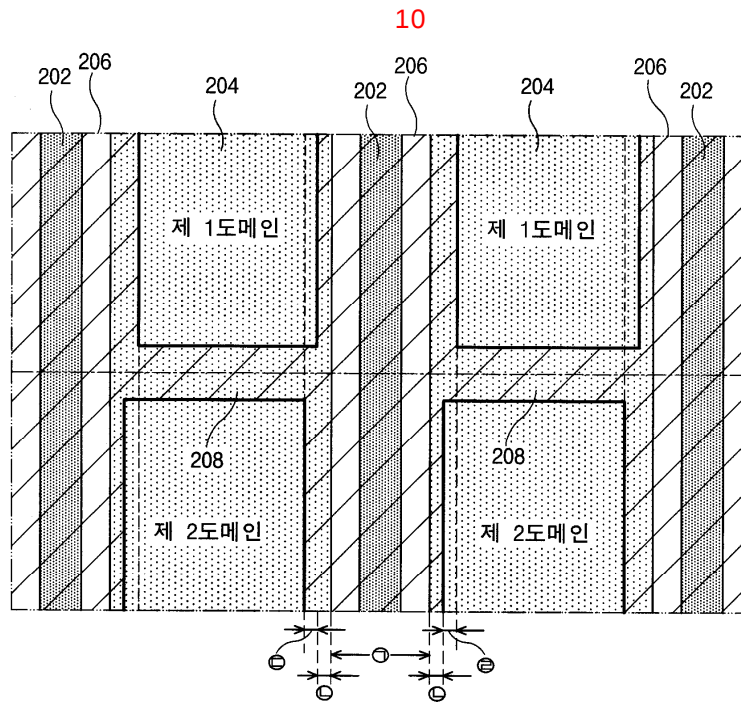
7a



7b







专利名称(译)	孔径比增强结构的结构液晶显示器		
公开(公告)号	KR100430804B1	公开(公告)日	2004-05-10
申请号	KR1020010070902	申请日	2001-11-15
[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	KIM GIHONG 김기홍 HONG HYUNGKI 홍형기		
发明人	김기홍 홍형기		
IPC分类号	G02F1/1337 G02F1/1335 G02F1/1362		
CPC分类号	G02F2001/133757 G02F1/136209		
代理人(译)	贞媛KI		
其他公开文献	KR1020030040573A		
外部链接	Espacenet		

摘要(译)

液晶显示装置包括彼此面对并且彼此间隔开的第一和第二基板，在第一基板的内表面上的公共电极，在第二基板的内表面上的栅极线，与栅极线交叉的数据线，连接到栅极线和数据线的开关器件，连接到开关器件并与数据线间隔开的第一像素电极，覆盖数据线并具有从数据线的中心线延伸的第一部分宽度的黑色矩阵到达黑矩阵的第一边缘，以及不同于从数据线的中心线延伸到与黑矩阵的第一边缘相对的黑矩阵的第二边缘的第一部分宽度的第二部分宽度，以及液体晶体材料层介于第一像素电极和公共电极之间。

