

(19)
(12)

(KR)
(B1)

(51) 。 Int. Cl. ⁷
G02F 1/133

(45)
(11)
(24)

2003 02 17
10 - 0372533
2003 02 04

(21)
(22)

10 - 2000 - 0038636
2000 07 06

(65)
(43)

2001 - 0015210
2001 02 26

(30)

1999 - 196209

1999 07 09

(JP)

(73)

가 가

1 1 1

(72)

가 50 가 가

(74)

:

(54)

2 1 ,

3 1 ,

4 1 .

< >

10 - - - , 100 - - - ,

100X - - - 1 (104X), 100Y - - - 2 (104X),

101 - - - (), 102 - - - ,

103 - - - , 104 - - - ,

104X - - - , 104Y - - - ,

105 - - - , 106 - - - ,

111 - - - , 113 - - - ,

115 - - - , 117 - - - ,

119 - - - , 121 - - - (TFT),

131 - - - , 132 - - - ,

141 - - - (), 151 - - - ,

171 - - - ,

200 - - - , 201 - - - (),

202 - - - , 203 - - - ,

203R - - - (R) ,

203G - - - (G) ,

203B - - - (B) ,

203D - - - ,

204 - - - ,

205 - - - (),

300 - - - ,

400 - - - ,
 400 - 1 - - - X - TAB, 400 - 2 - - - X - TAB,
 400 - 3 - - - X - TAB, 400 - 4 - - - X - TAB,
 411 - 1 - - - Y - TAB, 411 - 2 - - - Y - TAB,
 421 - - - X , 431 - - - Y .

狀) , 1 (cell gap) (柱
 , , 가
 (active matrix) , (cross talk)가
 , , 1
 , , (color filter layer) , ,
 , 가
 , (球狀) (散布)
 , ,
 , (array) , ,
 가 .
 , ,
 , ,
 , 가
 , (seal) (區劃) 가
 , , 가
 가 .

(狹額縁化)

가 .

가 .

1

1

2

1

2

가

1

2

(柱狀)

가

()

1

1

(10)

2

(10) , 1

(200) ,

1

(100)

(200)

(100) ,

(100)

00)

(200)

(104X, 104Y)

(106)

(102)

(10)

,

(102) ,

(1

(102)

(106)

(100)

(glass substrate; 101)

(102) ,

2

3

(151),

(111),

(103)

가 0.7mm

(Thin

Film Transistor) TFT(121) . m × n (151) , (101) . m (111) (151) . n (103) (151) m × n TFT(121) m × n (151) (111) (103) .

(111) , - (103) (101) (113) .

(151) (Indium Tin Oxide) ITO .

TFT(121) (111) (112) . TFT(121) (112) (113) (115) (117) a - Si:H . (115) (117)

(115) , n⁺ a - Si:H (119) (131) (1 (51) . , (115) (119) (132) (103) . TFT(121) (117), (131) (132) (171) .

(100) , (200) (介在) (300) (141) .

(10) , 1 (額縁) (100) (104X) 1 (101X) , 1 (101X) X - TAB(401 - 1, 401 - 2, 401 - 3, 401 - 4) .

2 (100Y) (104X) 1 (101X) 2 (100Y) Y - TAB(411 - 1, 411 - 2) .

X - TAB(401 - 1, 401 - 2, 401 - 3, 401 - 4) (10) (10) X (421) .

Y - TAB(411 - 1, 411 - 2) (10) Y - TAB(411 - 1, 411 - 2) Y (431) .

(200) (102) , 3 가 0.7mm (201) (202) . (202) (100) , TFT (202) , (單體) .

(200) , , (203R, 203G, 203B) , (201) (151) , (R) , (G) , (B) (203R, 203G, 203B) ,

(200) , (300) .

(203R, 203G, 203B) , ITO (204) (204) (100) (300) (205) .

(204) , (151) (300) (300) ITO . (204) , (溶出) .

, (10) , (151) (204) (300) (condenser) . (斷續的) , .

, (300) (300) , (300) 가 .

, (204) , 가 .

, (200) (102) (104X, 104Y) , 2 (400) 4 (100) (200) (100) (角) (柱狀) (200) 5 μ m 가 , 5 μ m .

(400) , , (10) , , (101) (201) (twist) .

, (102) (400) , 4 (200) (203) (400) , (201) (202) , (204) .

(102) (200) , (201) (202) (201) , (203) (203) (204) (204) (400) (204) , (202) (204) (205) , (102) (204) (400) .

(200)

.

, (104) (400) , (201) (202)
 (203D) (203D) , (203) (203)
 (203D)

(104) (400) , (100) (200) , (100)
 (105)

(104) (200) , (201)
 (202) (202) (203D) (202)
 (203) (400) (1
 04) (200)

(102) (204) , (203) 가 $2\mu\text{m}$ 50nm
 (104) (102)
 (400) (102)
 가

, (102) (104) (400) , 가
 , (400) 가 가

, (104) (400) , (203D)
 (400) (400)
 (203) (10) 가

, (400) (203)
 (204) (100) 가 (204) (100)

, (400) , (203)
 가 (400)

, 가 (102) (104) (104)
 (102) (102) (104) 가

, 가

(color filter on array)

(57)

1.

1

1

2

1

2

가

1

2

(柱狀)

2.

1

3.

1

2

4.

3

5.

4

6.

1

7.

5

8.

1

2

1

2

1

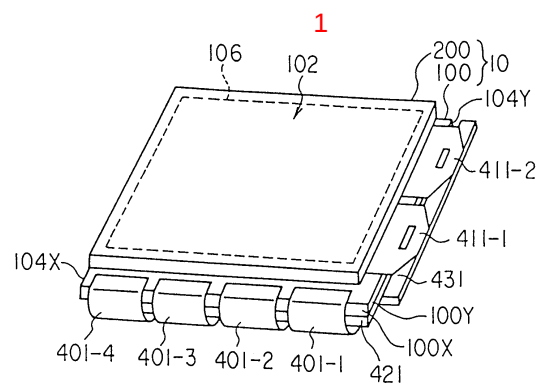
2

2

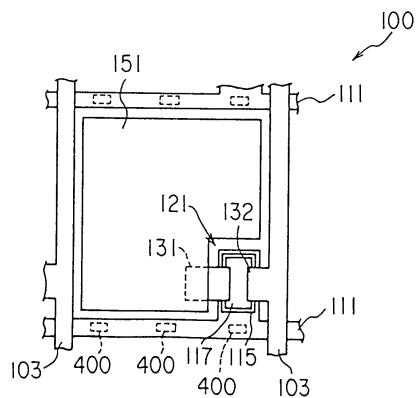
가

9.

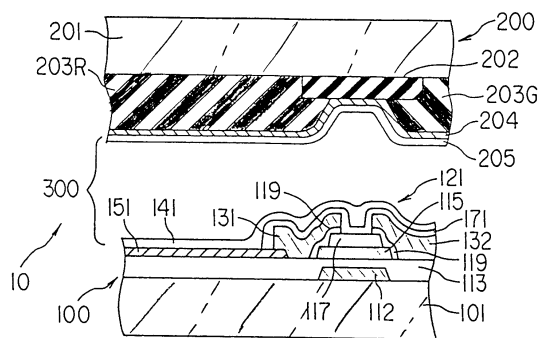
8



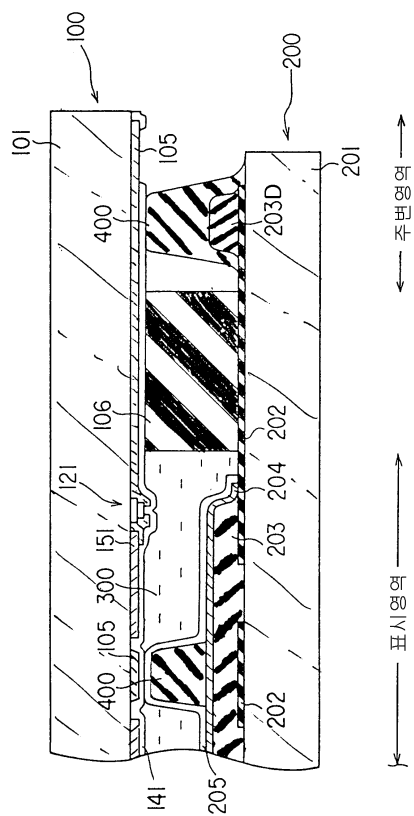
2



3



4



专利名称(译)	液晶显示装置及其制造方法		
公开(公告)号	KR100372533B1	公开(公告)日	2003-02-17
申请号	KR1020000038636	申请日	2000-07-06
[标]申请(专利权)人(译)	株式会社东芝		
申请(专利权)人(译)	Sikki东芝股份有限公司		
当前申请(专利权)人(译)	Sikki东芝股份有限公司		
[标]发明人	MORIMOTO HIROKAZU		
发明人	MORIMOTO,HIROKAZU		
IPC分类号	G02F1/1335 G02F1/1339 G02F1/1333 G02F1/133 G02F1/1343		
CPC分类号	G02F1/13394 G02F2001/133388 G02F1/133514		
代理人(译)	KIM , YOON BAE		
优先权	1999196209 1999-07-09 JP		
其他公开文献	KR1020010015210A		
外部链接	Espacenet		

摘要(译)

在本发明中，间隔物设置在对向基板的侧面上。显示区域中的间隔物设置在设置在玻璃基板上的遮光层，设置在遮光层上并具有预定厚度的滤色器层，以及覆盖滤色器层的相对电极。周边区域的垫片，设置在玻璃基板上的遮光层和设置在遮光层上并具有预定厚度的虚设滤色器层。由于对电极的膜厚度与滤色器层的膜厚度相比非常薄并且可以基本上忽略，因此可以使显示区域和周边区域中的单元间隙均匀。度

