

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl.⁷
G02F 1/1339

(11)
(43)

10-2004-0061980
2004 07 07

(21) 10-2002-0088289
(22) 2002 12 31

(71) . 20

(72) 1 1015-1

(74)
:

(54)

(patterned spacer)

1 2

(ball spacer)

10

1

2 1 2 가

3 가

4a 4b

1, 1, 1 (23) 1 () (23) 2 () (6) (P)
 (17) (5) 2 (6) (T)가 .
 (P) (T) () (18) .
 (18) (AI)
 2 (6) 1 (23) (21) ,
 (P) (22a,22b,22c) ,
 1 (23) (24) .
 1 2 (23,6) (20) .
 1 2
 2 1 2 가 .
 1 (6) 2 (24) (40)가 .
 (40) (20) .
 (40) (20) (40)
 (dark state) (40) (L)
 가 .
 1 2
 3 가 .
 1 (50) 2 (60) 1 (50) (T)가 ,
 (52) (54) (56) (58) (59) .
 (58) (60) (64)가 (T) (62)가 ,
 (P) (64) (66) .
 (68)가 1 (50) 2 (60)
 (68) 1 2 (50,60)
 2 (60)

(68)

(68)

가 (negative) (positive)

4a 4b

4a (80) (82) (82)

(84a,b,c)

(negative) (84a,b,c) 가 (86) (86) (80) 가

(PR)) (88)

가 PR (solvent) (sensitizer) (resin) (UV)

(cross-linking)

가 가

(88) (A) (B) (M)

(A) (84a,c)

(M) (88)

(90)

5a 5b

5a (80) (82) (82)

(84a,b,c)

(positive) (84a,b,c) 가 (86) (86) (80)

(PR)) (88)

(88) (A) (B) (M)

(B) (82)

(M) (88)

(90)

가 PR PR

6 PR

(80) PR (88) , PR (88) (A) (B)

(M)

(B) (D)

(M) (A) (L) (B)

(B) PR 88)

PR (88) (90)가

, 가 PR 7 .

7 가 PR .

(M) , (80) PR (88) , PR (88) (A) (B)

(A) (D) .

(M) (A) (L) (C)
(C) PR (88) .

, PR (88) , 가 (90)가 .

가 PR ,

가 , 1

, 1 2 (21) ,

, 가 .

, 8 9 .

8 1 - , 9 8 B

1 (6) 1 2 (6) (P1,P2) (17)
(17) (23) (P1,P2) (22a,22b,22c)가
(21)가 .

1 2 (6,23) (30)가 .

, (17) (18) b , (18) a , (17)
(21) a+2b .

, a ()
가

가 , 2b

1 (6) 2 (23) (21)가
(21)가 (align margin) .

가 가 .

, 가 PR .

가

가

가

1 2

가 가

가

1 2

(Ag) (Al)

10 1

1 (100) 1 (100) 2 (140) (110) (114) 2 (140) (116)

102) (T) (114) (118) (114) ()

(P1,P2)

120) (T) (118) (100) (120) (P1,P2) (116) (124) , (

, (124)

,

1 (118a) 2 (118) 1 (118a) 2 (118b) (118b) (124)

1 (100) 2 (140) (134a,134b,134c)가 , (134a,134b,134c) (132)

4) , (150) (P1,P2) (12)

, 가

, (150) (124) (B) (contrast)

, 11 1

0) , (106,118) (P1,P2) (106) (106) (118) (11) (118) (102) , (114) (116) (124) (T)가 , (P1,P2) (116) (124)

, (118) 1 (118a) 2 (118b) (124) (line)

1 (118a) 2 (118b)

6) (P1,P2) (124) (124) (F) (150) (10) (150) (106)

, 1 2 (118a,118b) (106)

, 12a 12f ,

12a 12f 11 XI-XI` ,

, 12a , (100) (102) (11 106)

(Al) , RC (delay) , (hillock) (Al/Mo)가

12b (SiO_x) (102) (100) (SiN_x) (108)

layer) (110)(active layer) (102) (108) (n+a-Si:H) (a-Si:H) (112)(ohmic contact)

12c (114) (Cr), (Mo), (Sb), (Ti) (114) (116) (P1,P2) (118)

1 (118) (100) 1 (118a) 2 (118b) (P1,P2)

1 2 (118a,118b) ()

BCB) (acryl) (resin) (114,116) (118) (100) (120) ()

(120) (116) (122)

(P) (120)

4) 12d (116) (P) (12)

(124) (Ag), (Al),

(124) (120)

12e (124) (100) 가 (ne) (126)

(100) (L) (126)

(L) (L) (F) (126)

8)가 12f (124) (F) (12)

가

가

가

(57)

1.

;

;

,

;

,

;

,

;

2.

1

,

1

2

,

3.

1

,

4.

1

,

,

5.

1

,

(Ag)

(Al)

6.

1

,

7.

1

,

가

가

8.

;

;

,

,

;

;

,

;

가

,

;

,

.

9.

8

,

1

2

,

10.

8

,

11.

8

,

,

12.

8

,

(Ag)

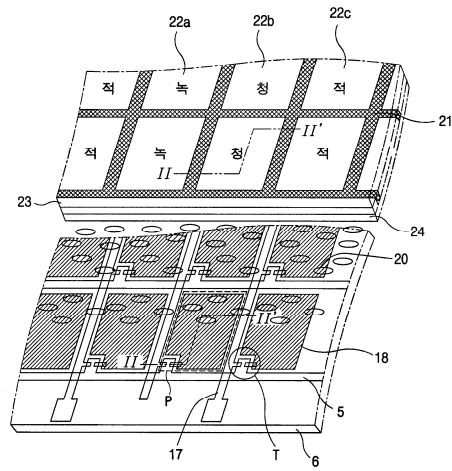
(Al)

13.

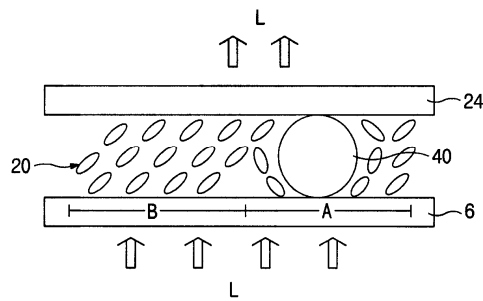
8

,

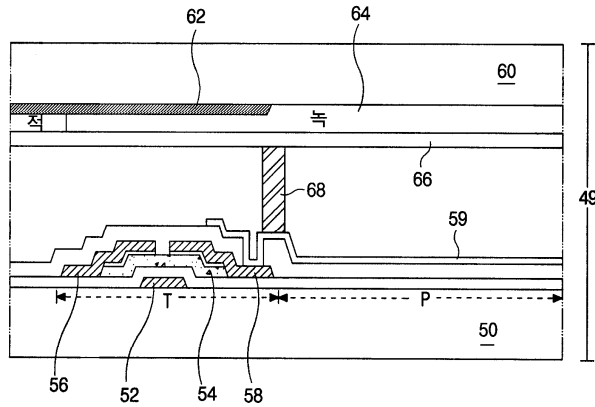
1



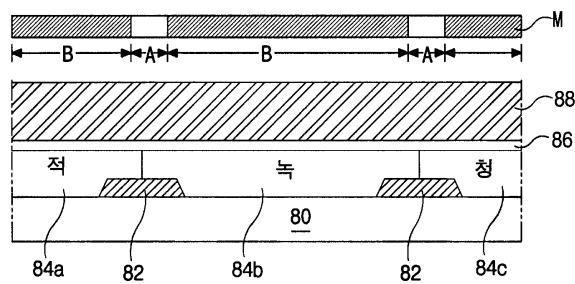
2



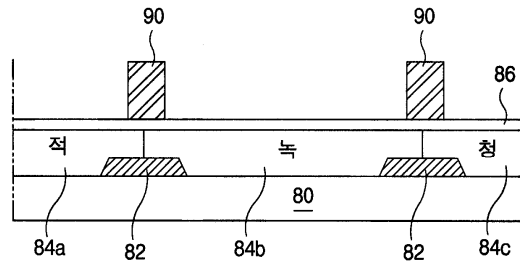
3



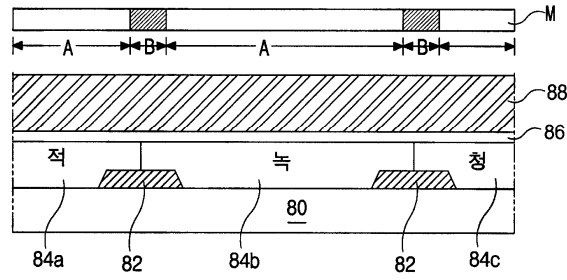
4a



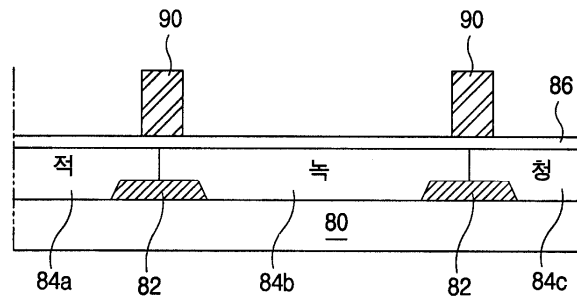
4b



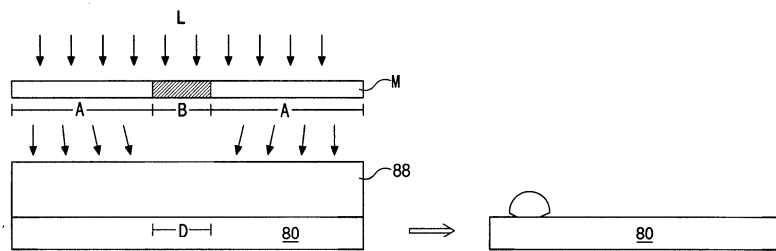
5a



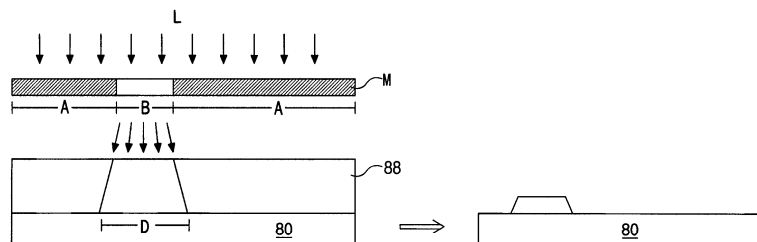
5b



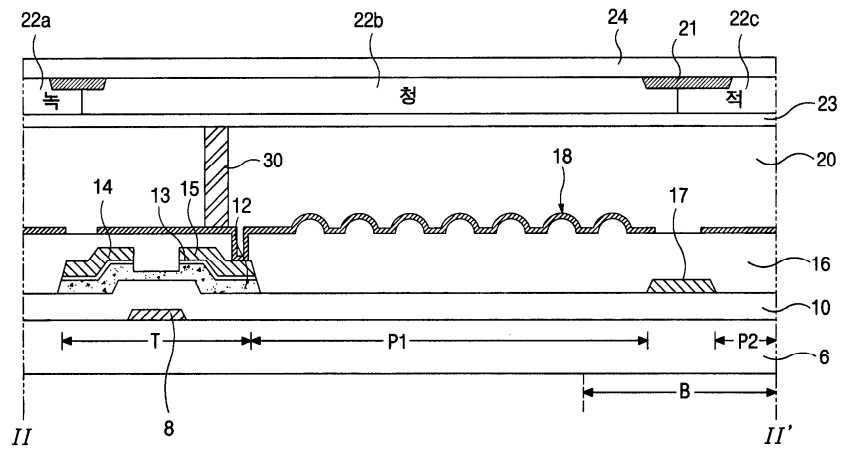
6



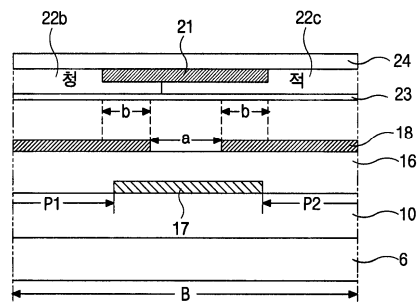
7



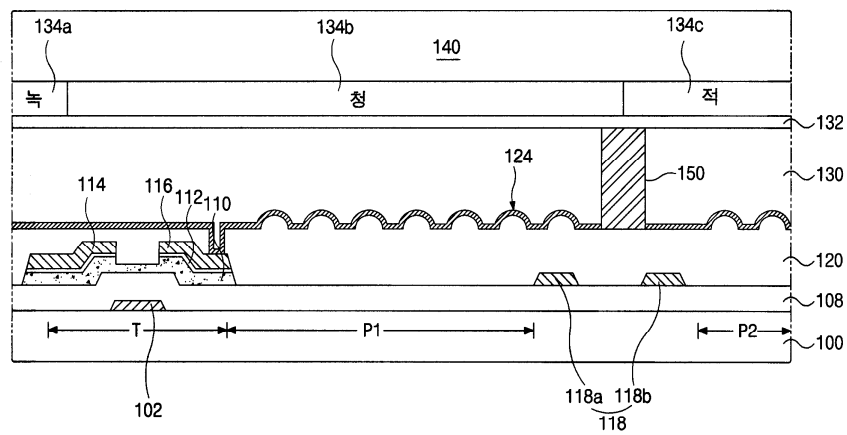
8



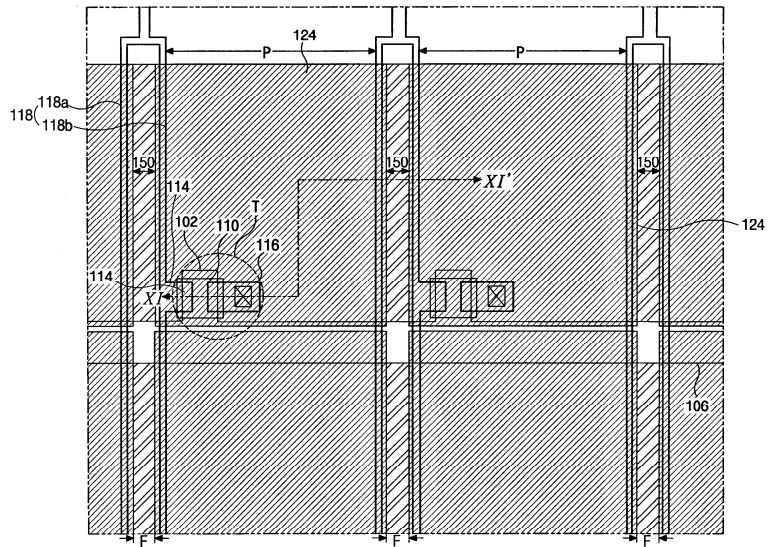
9



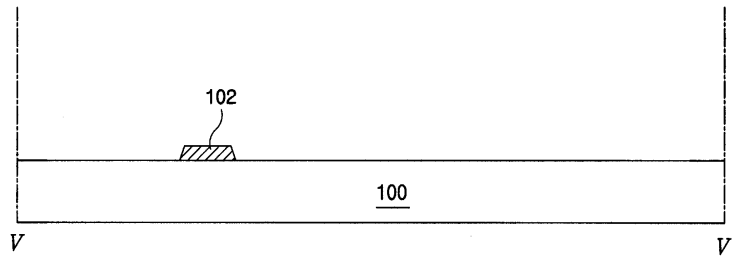
10



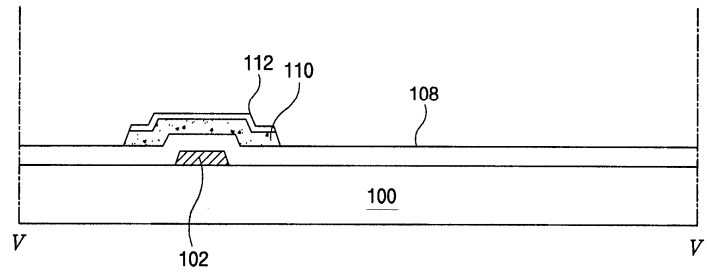
11



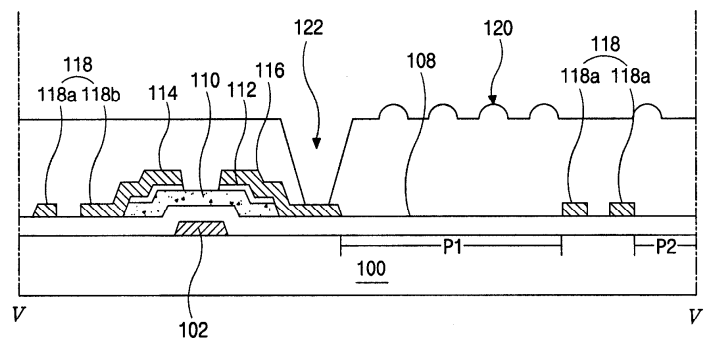
12a



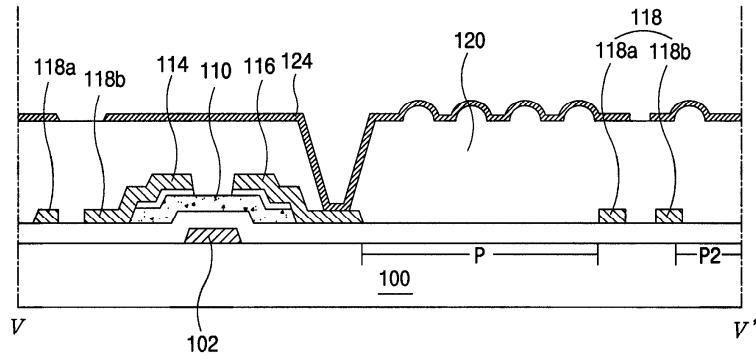
12b



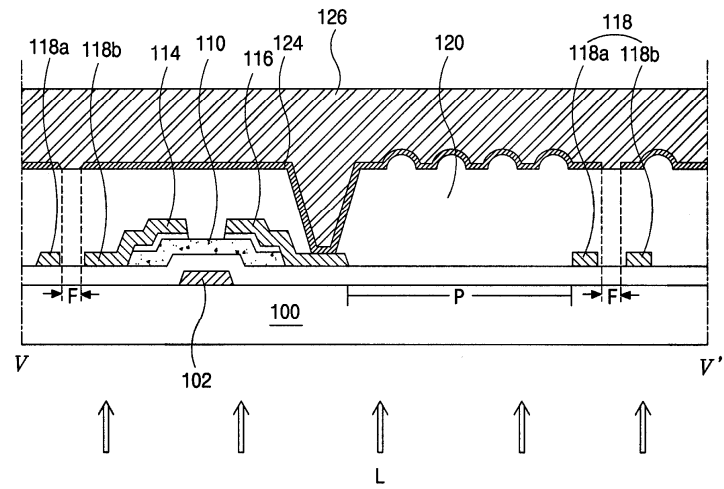
12c



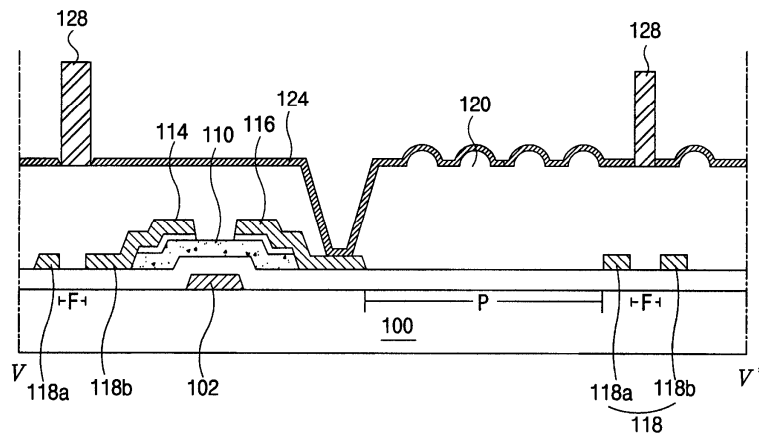
12d



12e



12f



专利名称(译)	用于反射型液晶显示装置的阵列基板及其制造方法		
公开(公告)号	KR1020040061980A	公开(公告)日	2004-07-07
申请号	KR1020020088289	申请日	2002-12-31
[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	KANG WONSEOK 강원석		
发明人	강원석		
IPC分类号	G02F1/1339 G02F1/1335 G02F1/1343 G02F1/1368		
CPC分类号	G02F1/13394 G02F1/133512 G02F1/133553		
代理人(译)	정원기		
其他公开文献	KR100460979B1		
外部链接	Espacenet		

摘要(译)

反射型液晶显示装置技术领域本发明涉及反射型液晶显示装置，其包括图案化的间隔物，并且涉及实现高开口率和高亮度的反射型液晶显示装置。在根据本发明的反射型液晶显示装置中，数据布线从基板的一端分支到第一线和第二线，并且每个分支的布线被配置为在平行方向上形成在相邻像素区域中的反射电极的下部。做吧 然后，形成与反射电极的间隔开的区域相对应的图案化的间隔物。在该配置中，由于不需要像现有技术那样在与数据布线相对应的上基板上形成黑矩阵，因此可以进一步确保与设计时考虑的胶合裕度相对应的开口率，从而实现高开口率和高亮度，通过形成图案化的间隔物，具有可以解决在使用传统的球形间隔物时发生的各种问题的优点。图10

