

(19)  
(12)

(KR)  
(A)

(51) 。 Int. Cl. <sup>7</sup>  
G02F 1/1337

(11)  
(43)

2002 - 0014999  
2002 02 27

(21) 10 - 2001 - 0038766  
(22) 2001 06 30

(30) 2000 - 197622 2000 06 30 (JP)

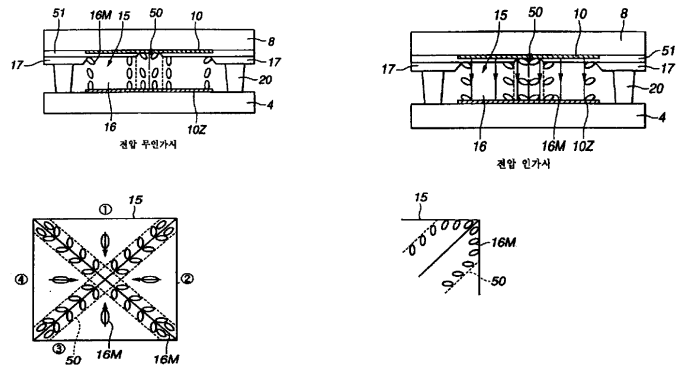
(71) 가 가  
가 가 가 6 7 35  
가 가  
가 가  
가 22 22

(72) 가 가 6 7 35 가 가  
가 가 6 7 35 가 가  
가 가 6 7 35 가 가

(74)  
:

(54)

가 ; 가 , ; ; ;



1a      1c

2a      2d

3a      3c

4

5

6

7

8a      8c

8b

9

10

가

11a      11c

12

/

13a      13b

14



10:

13:

16:

17: (壁剖)

18, 19:

20:

25, 26:

50:

101, 102:

가  
가

,  
, TN (TN)

가

TN

( )

UV

가



가 , 가

4 , 2

가

, 2 가

가 가

가

가

가

2

2

8

, 2

4

4

, 가 /

가

8

가

가

4

가

/

가 가 .  
 , 가 , .  
 , 2a 2b 2c 2d 가 가  
 90° TN TN 가 . TN ,  
 (8) (16) 가 (4, 8), (16),  
 (17) (10) (4) (10Z) 가 .  
 (15) (8) 가  
 (17) (15) (16) (51) (  
 10) (17) (4 8) (20)가 .

(17) 2c (17) (50) (15) (16)  
 (15) (17) (51) (15)  
 (16M) 2 4  
 (16M) 2  
 (16M) 2d  
 (16M) (15) 가 가 2a  
 (4, 8) 가 가  
 (16)

(16M) (4, 8) 가  
 (16M) (17) (50) ( )  
 가 (16M) (17) (50) 가  
 4 (15) 8

3a, 3b 3c , .  
 (1) (2) (1) ( )  
 (11) (2) (5)  
 (1) (5)

(2) (10) (11) , (5) (26) (A K) (19) (1) (1) (7) (1) (1) (1) 가 .

(2) (1) (2) (3) (4) (3) (2) (3) (16) (20) (8) (16) (3) (21) (15) (15) (15) (16) (17) (16) (16) (1) 5) (16) (13) (8) (BM) , R, G B 3가 (9) (11) (13) (10) .

2 가 4 , 2 (101, 102), (K1) (A1) (11) (101, 102), (16), (3) (3) 가 가 (101, 102) 가 , 가 (16) , (16) (SW1) (101, 102) (3) (SW1)가 (SW1)가 (16) 가 (3) .

5 a , (8) (8) (8) b , (17) (8) (17) c , (20) (17) ( ) d , (17) (20) (8) (2) (2) a d e 가 (2) (2) f , (21) (2) 가 .

g , (2) (8) . ( (

20) (17)

(21) h , (16)

(16) n-

(15) AC (16) 가 ,

(17) UV (15)

6 . - 가 , (15)

가 , (15)

가

7 (1)

(1) (18, 19) (1) (18, 19)

(18) (26) (1) (19) (25) (1)

25, 26)

(25, 26) ,

(1) 90 .

(18) (1) 90 ,

(19) 가 (1)

(18) (19) (1)

9)

8a 8c

(2) (3) (1) ITO (10) (1) (13) CF

(8) CF (8) (3) (16) (15) (1)

0) (50) (17) (51) (51) , (1)

(5) (2) (4)

(PL) (4) (3) (2)

9 S1

CF , CF

CF S2 ITO

S3 ,

S3 , - , , S32, S33 S34 S35 . ,  
 CF ( ) , ,  
 가 , 2 $\mu$ m , 45° S4  
 ( ) , ,  
 가 , 2 $\mu$ m (d)  
 1/2 , 45° S5 , ( ) ,  
 가 , ( n)  
 (d· n) (d) ,  
 6 $\mu$ m가 ( ) , CF  
 ( S6).

CF S9 , P[L S8 , PL , PL  
 ( S7). CF ( S7), PL  
 S11 S12 , 2 2  
 ( ) ASM , 가 , 가  
 가 가 , 가 (PALC ) PALC  
 ( S13).

13a 13b 가 가 가  
 (1) CLC 가 가  
 ( ) Ci CLS Ci 가 ,  
 가 . 가 .

11a 11c 11a  
 11c , ,  
 11a  
 (15) 4 4 11b 3a  
 3c

11c 8 11c 11b

12 /

A B 4 8 12

13a, 13b 4 8

가 13a 13b , 4- 8-

4-

14 2a 2d

(50) (51)

d2 a dd da (10 10Z)

(17) (1) LC (15)

(51) (1) (16) 가 가

15 가

(51) (16) (10, 10Z) 가 가

V V2 , 가

V1 V0 가 0 가 , V0

16 14 15 16 ,

(等) (V/V0) (da) A B 5 10

(51) ( a) 가 (等) V0 가 , 가

V0 (等) (da)가 가 V 가 , 가

17 (V2/V1) (da) 가

, V1 V2 (da)가 , V1 V2

가 가 가 가 , (d

a)가 , 0.5  $2\mu\text{m}$  가  $6\mu\text{m}$  (A B)  
 (51) ( a ) 가 .

18 8a 8c 14 ,가 (2Z)  
 (3) 가 (2Z) (3) i di

19 18 가 가 가 V2 , , (3)  
 가 가 가 V1 .

20 18 19 (等) (V/V0)  
 (da)가 16 20 , 가  
 가 (16) (2) (3)

21 가 (V2/V1) 가 가 21  
 가 , 17 21 , 가 ,  
 가 , 20 21 ,

22 2 (10) (BM) (13) (9) 가  
 (10) (50) , 가 (50) 가  
 , 가

23 22 가 (50)  
 (10) , 가 (50)

24 (50) (50) (10) (51) (9) (10)  
 ,

25 가 (10) (17)  
 (17) 24

26 8a 8c (11)  
 (50) (13)

27 (13) (10) (9) (50) 가

28 (50) 가

29 2c (15) 가  
 (50) (50) (15) 가  
 (50) 가

가 TN 가 90°  
 , n- 가 ASM 가 90° 가  
 TN  
 (ECB) TN ECB  
 가 TN 가  
 ° 가 30 TN 12 12 B 45  
 0 A B 가 4 TN 8 3  
 / , , ASM  
 , 12 A 30 A ECB 가 TN  
 ECB

31 (17)  
 (50) (17) (50)  
 , ECB 가  
 , 45° 가 31  
 가 TN  
 , 13 TN

32 31 (17)  
 (50) 31

(57)

1.

,  
 ;  
 ;  
 가 ;  
 가 ;

2.

1 , ,  
 ,

3.

2 , 4 , 2  
 ,

4.

1 , ,  
 ;

5.

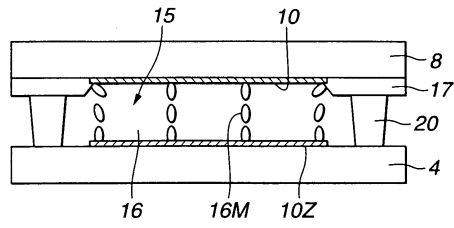
1 , 가 ,  
 ,

6.

1 , ,  
 2 가 ,

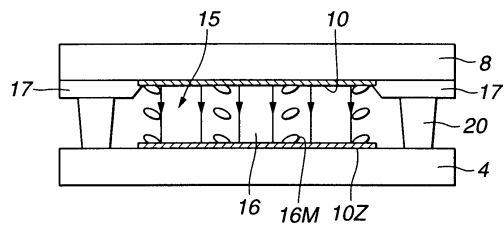


1a



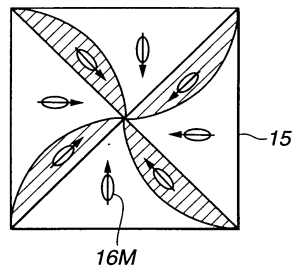
전압 무인가시

1b

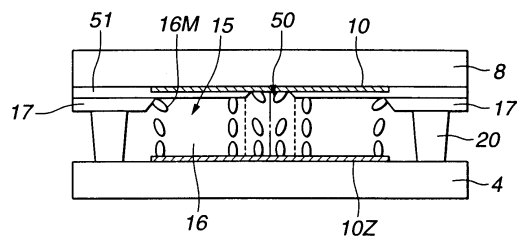


전압 인가시

1c

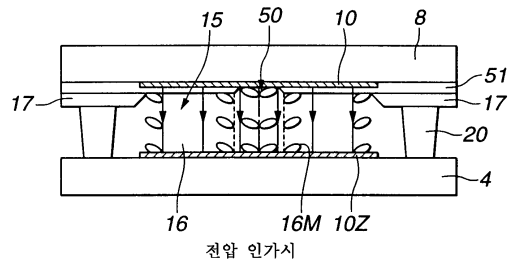


2a

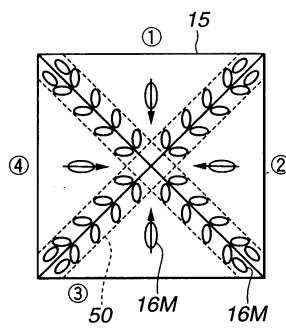


전압 무인가시

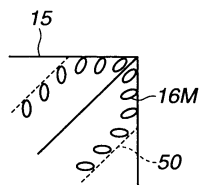
2b



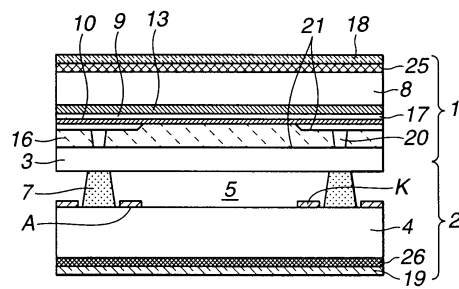
2c



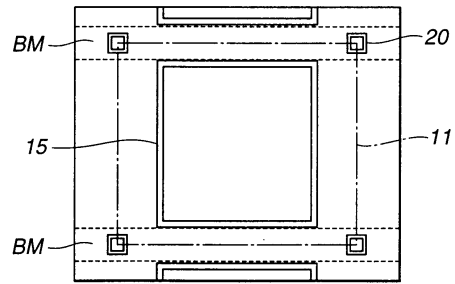
2d



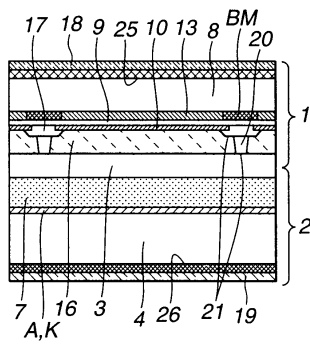
3a



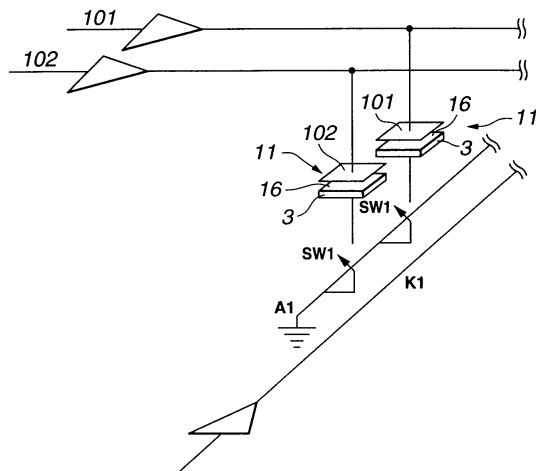
3b



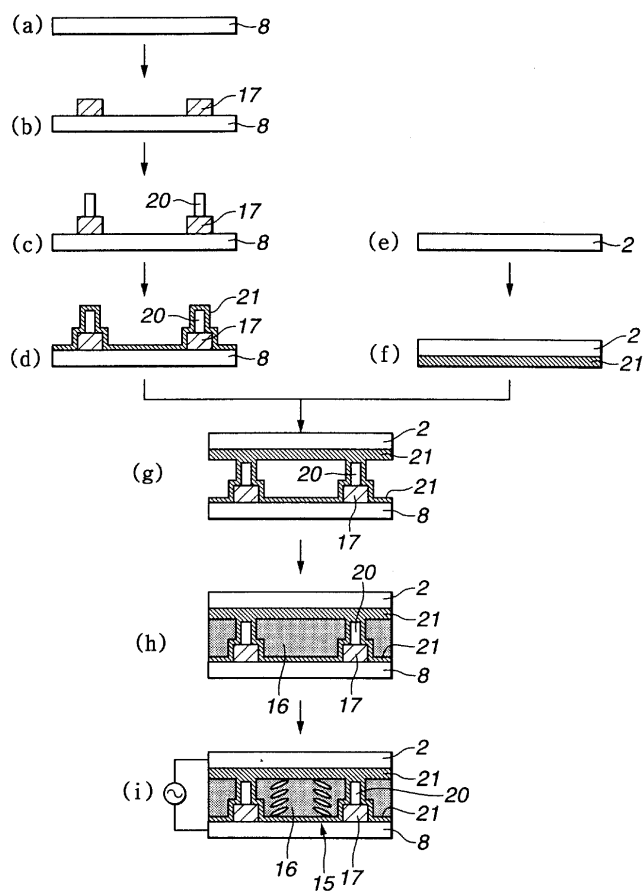
3c



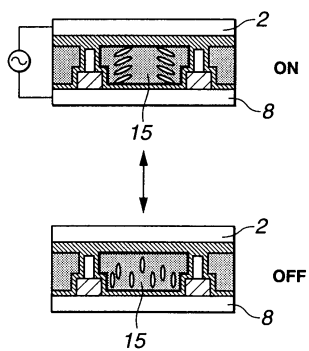
4



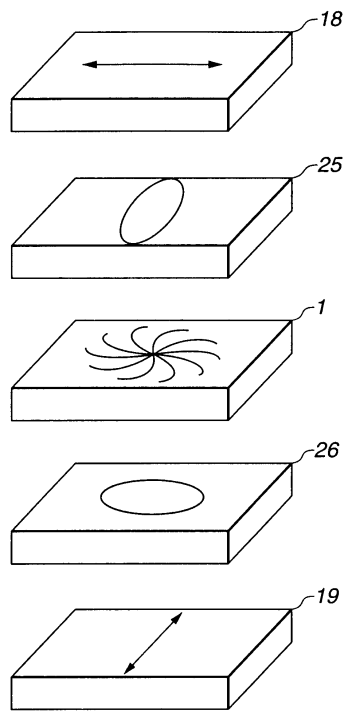
5



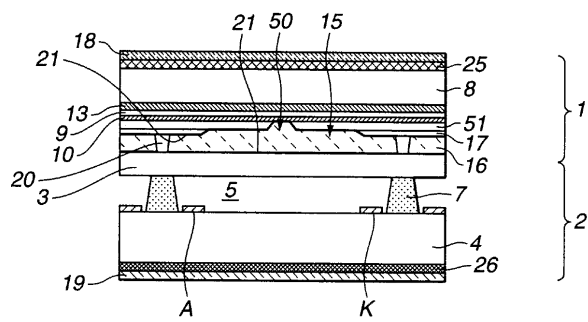
6



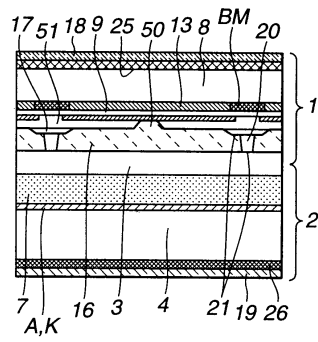
7



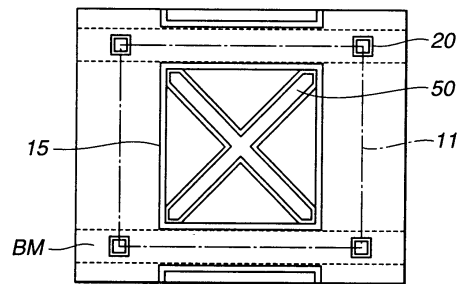
8a



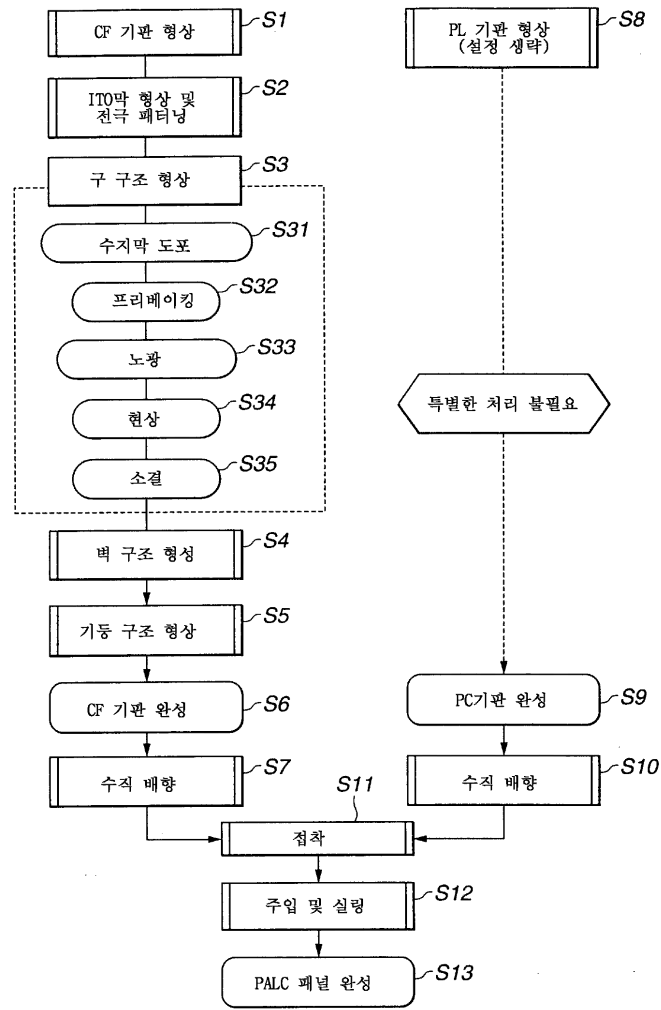
8b



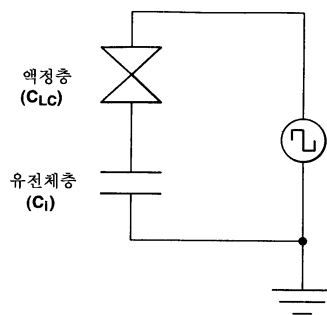
8c



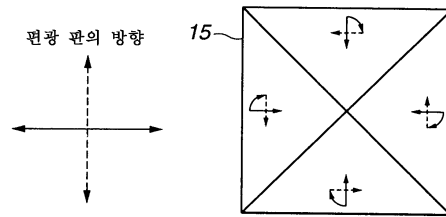
9



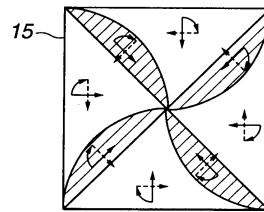
10



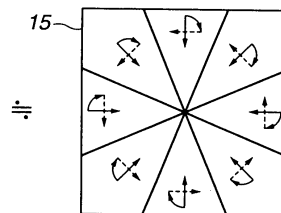
11a



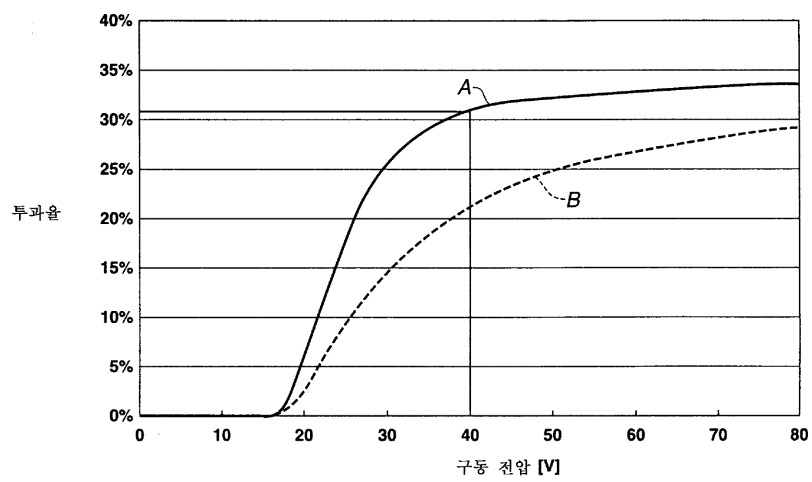
11b



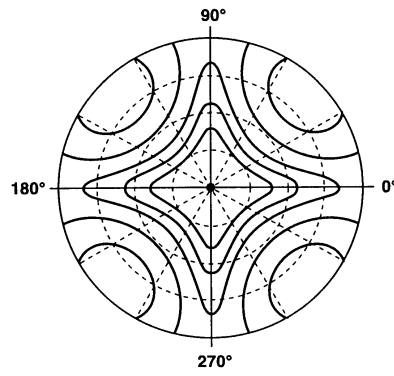
11c



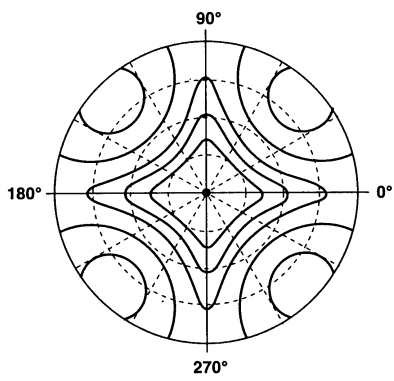
12



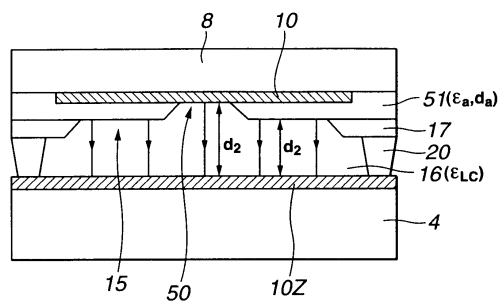
13a



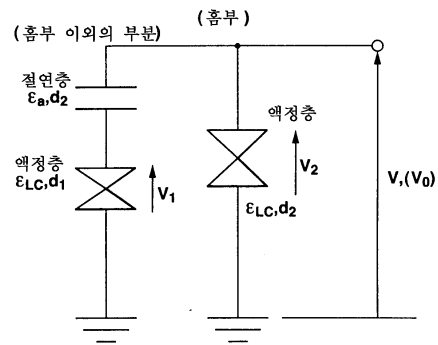
13b



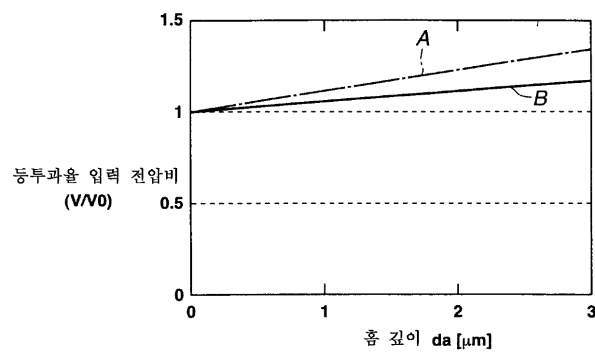
14



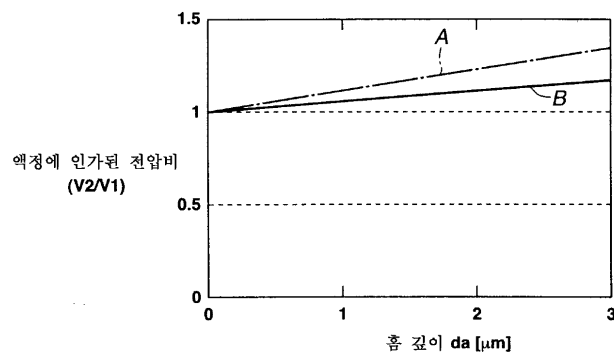
15



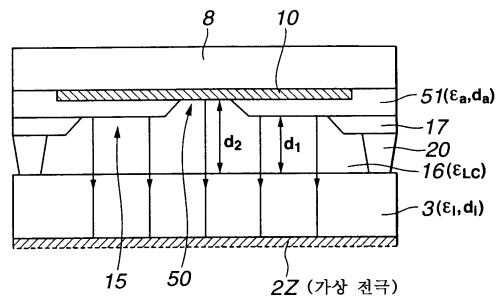
16



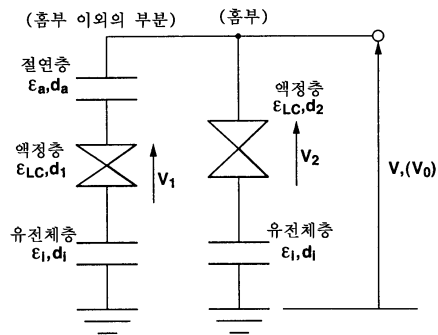
17



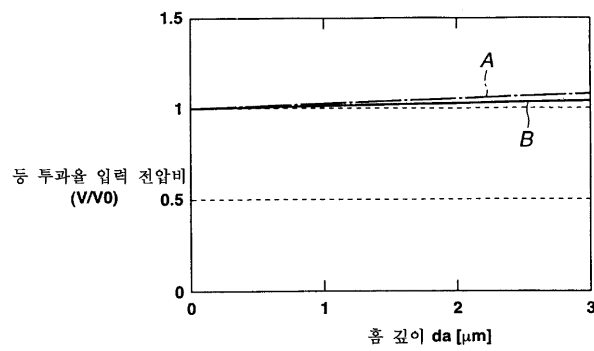
18



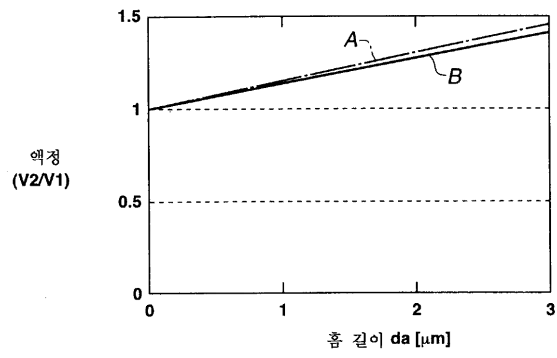
19



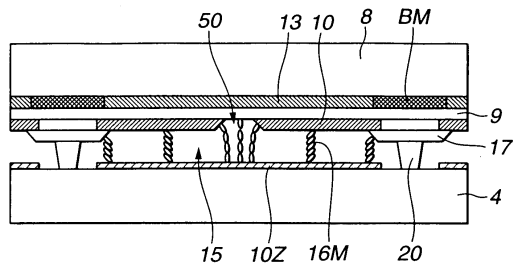
20



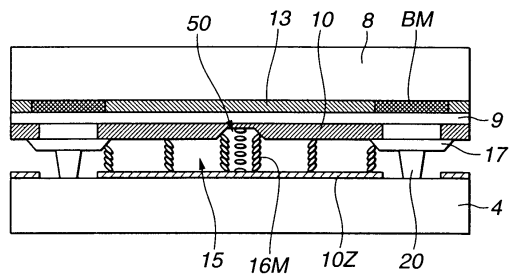
21



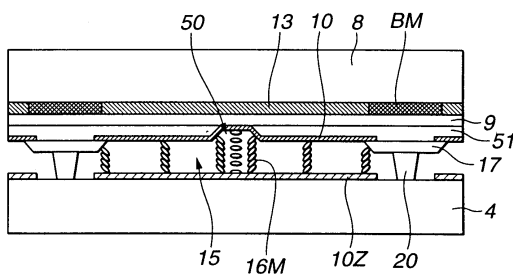
22



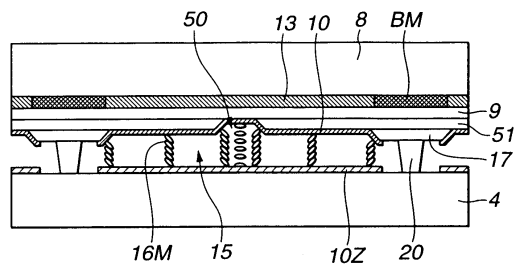
23



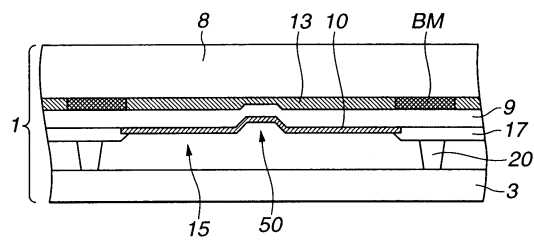
24



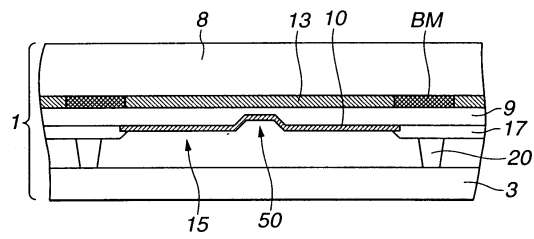
25



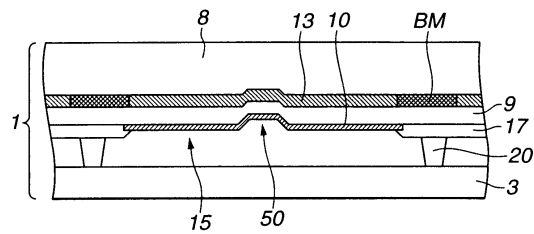
26



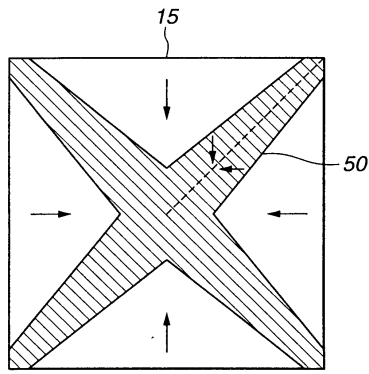
27



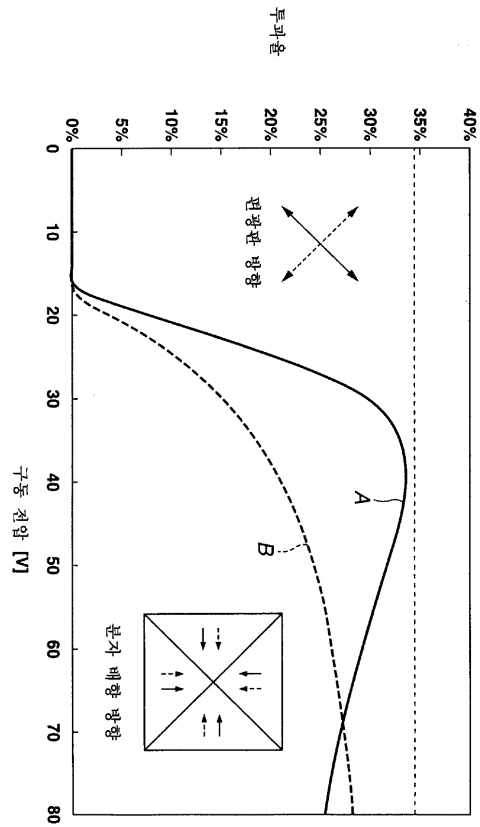
28



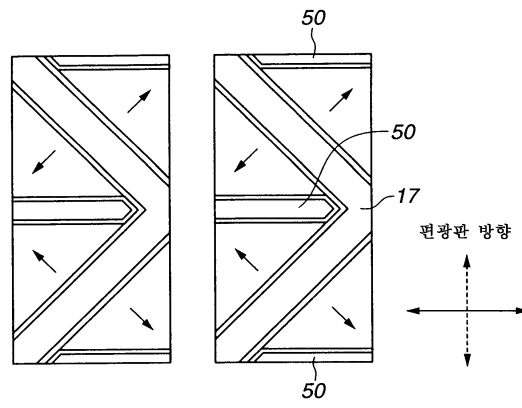
29



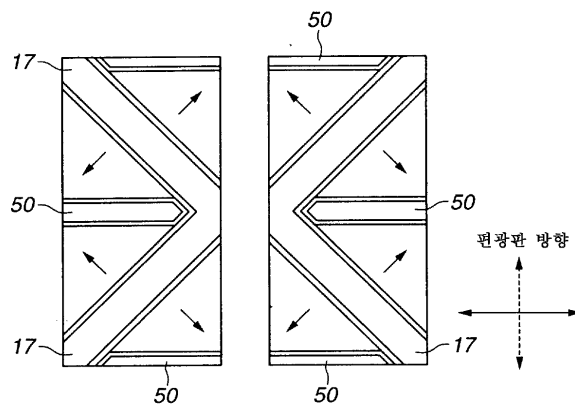
30



31



32



专利名称(译)	液晶显示装置及其制造方法		
公开(公告)号	<a href="#">KR1020020014999A</a>	公开(公告)日	2002-02-27
申请号	KR1020010038766	申请日	2001-06-30
[标]申请(专利权)人(译)	索尼公司 夏普株式会社		
申请(专利权)人(译)	索尼公司 夏普株式会社		
当前申请(专利权)人(译)	索尼公司 夏普株式会社		
[标]发明人	IMAI MASATO 이마이마사토 ENDO KAZUYUKI 엔도카즈유키 UCHIDA TOSHIHISA 우치다토시히사		
发明人	이마이마사토 엔도카즈유키 우치다토시히사		
IPC分类号	G02F1/1335 G02F1/139 G02F1/137 G02F1/1337 G02F1/1333		
CPC分类号	G02F1/133707 G02F2001/13712 G02F2001/133742 G02F1/133753 G02F2001/133776		
代理人(译)	李, 何炳 李贝尔 申铉MOON		
优先权	2000197622 2000-06-30 JP		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

本发明的液晶显示装置可以通过使用轴对称取向来改善取向。液晶显示装置包括一对基板, 所述一对基板布置成彼此面对, 其间具有预定间隙, 液晶保持在间隙中, 用于向液晶施加电场以改变其取向状态的单元; 在每个小尺寸区域中形成的壁结构, 通过沿着至少一个基板的部分分割而获得, 以便根据电场的施加以轴对称方式定向放置在每个小尺寸区域中的液晶; 并且在每个小区域中形成凹槽结构, 并适于调节与壁结构配合的液晶的轴对称取向。

- 1 - 指数方面 基板, 液晶, 墙体结构

