

(19) (KR)  
 (12) (A)

(51) Int. Cl.<sup>7</sup>  
 G02F 1/1335

(11)  
 (43)

10-2004-0055666  
 2004 06 26

(21) 10-2003-0093510  
 (22) 2003 12 19

(30) JP-P-2002-00369954 2002 12 20 (JP)

(71) 가 가  
 2 4-1

(72) 가 3 3-5 가 가

(74)

:

(54)

, 가 , , 가

T	,	(10, 25)	(50)	,	D1
		R	(50)		
		,	(10, 25)		
		(9, 31)	T		
		,	(41, 42)	R	(9, 31)
(43, 44)가	T	R	(43, 44)	(41, 42)	

3

1 1 가 ,  
 2 ,  
 3 ,  
 4 ,

9 : TFT

20 : 22 :

25 :                    31 :

41, 42 :                  43, 44 :

50 : R :

T :

(窓部)

가

가 . 가

가

(Jisaki)  
3

(1) , 가 「VA(Vertical Align

(2) , , 1 ). ( )가 「 」 (

(3) , 8

( 1 ) 11 - 242226

( 1) 'Development of transflective LCD for high contrast and wide viewing angle by using homeotropic alignment', M.Jisaki et al., Asia Display/IDW'01, p.133- 136(2001)

$$(\quad - \quad , \quad - \quad )^2$$

, , , (中間調) ,  
, 12(b) 2

가 가

1



$$\left( \begin{array}{c} 1 \end{array} \right)$$

1

(Thin Film Transistor, TFT )





, R 28%, T  
 19% .  
 , 2 , R T , R T  
 1 , T (24) , T  
 ( 3 )  
 , 3 6  
 6 3 , (25) 1 3  
 , (45, 46) R , 6 T 3  
 1 , 가 ,  
 ,  
 T 5μm , (9) (31) R R 7μm,  
 5μm , (9) (31) R 25%, T  
 18% .  
 , TFD( , 1 ) ,  
 ,  
 , ( ) , ( ) , ( ) , ( ) , ( ) ,  
 ( 4 )  
 , 4 7  
 7 4 , , R / 1 3  
 / , R / /  
 , R T , / , 1 , 가 ,  
 , 7 3  
 ( , (9) (31) R R T 5μm  
 T R (44a) (43a) (44b) T 6μm  
 R (43b) 38%, T 17μm  
 19% .  
 , R T  
 ,  
 ( 5 )





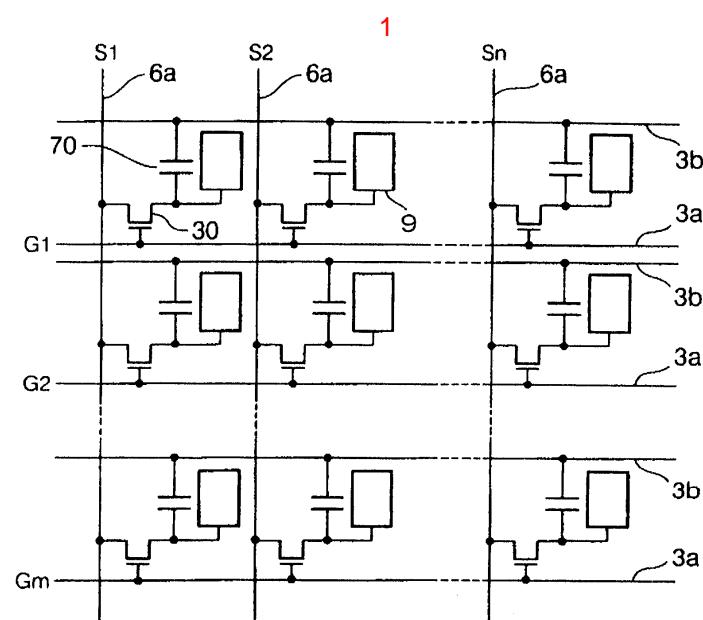
가

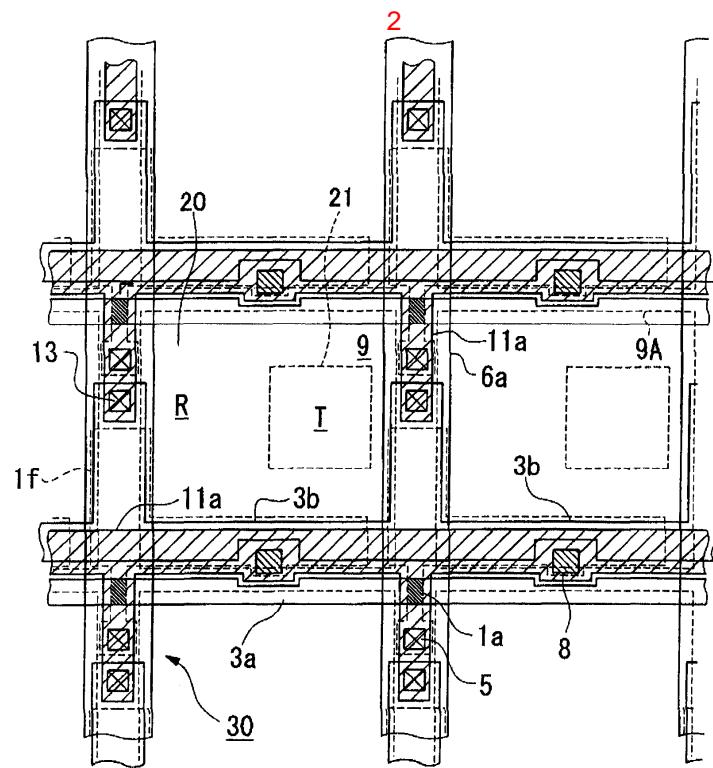
7.

6

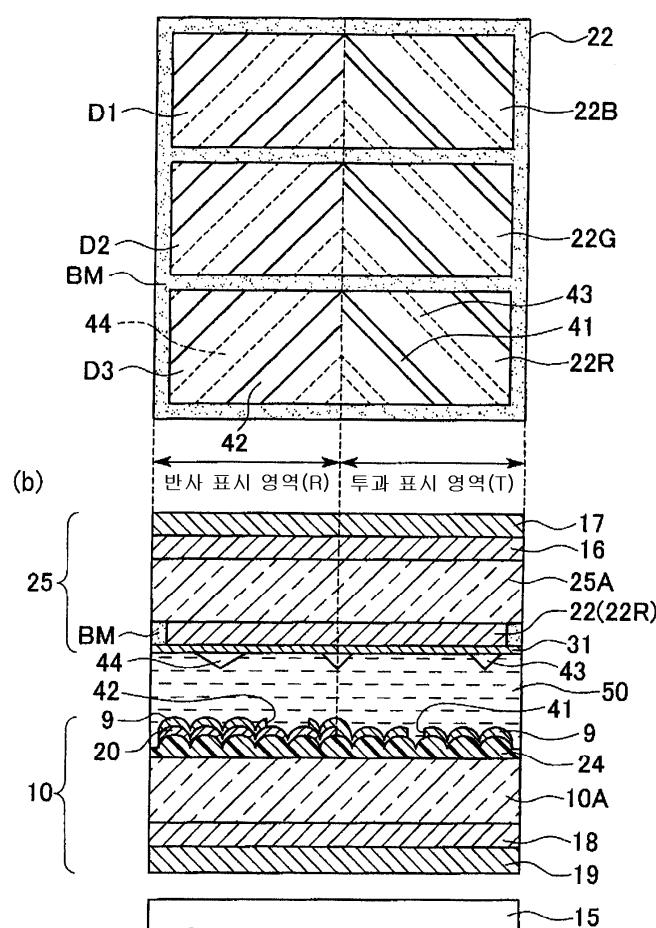
8.

1

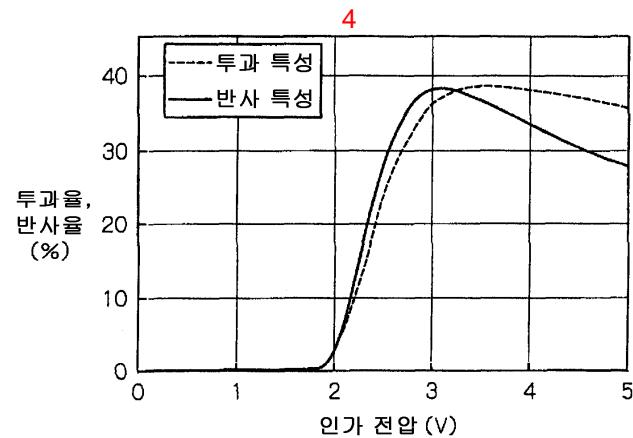




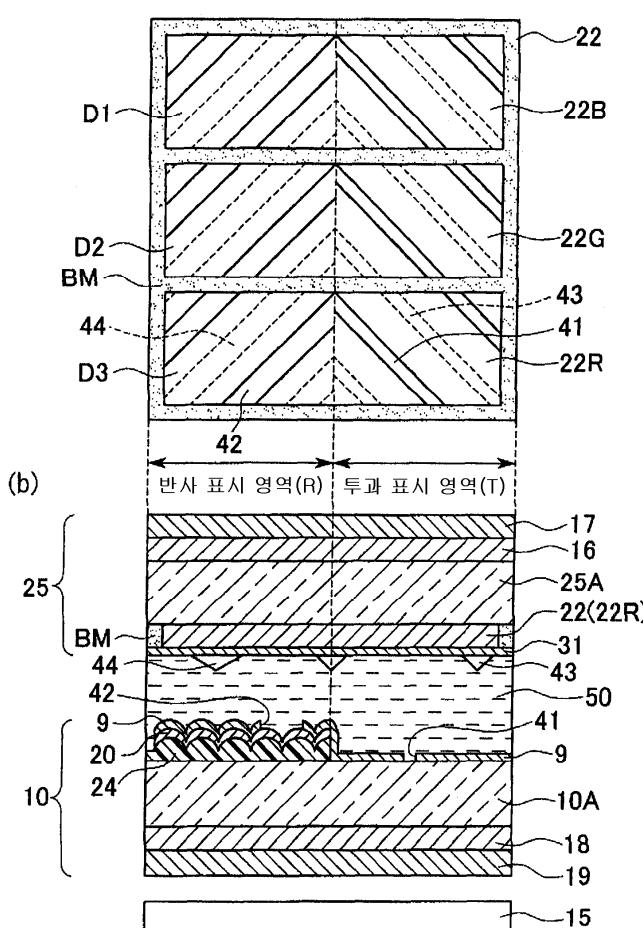
(a)



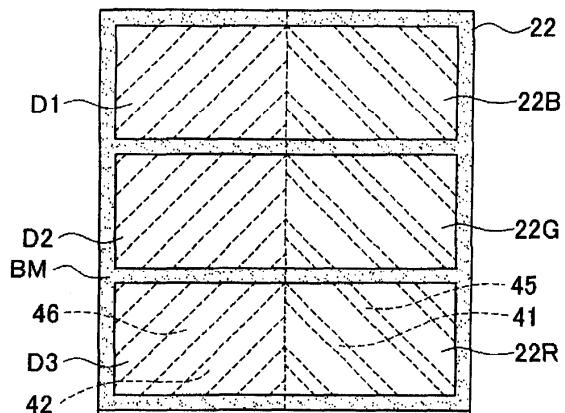
(b)



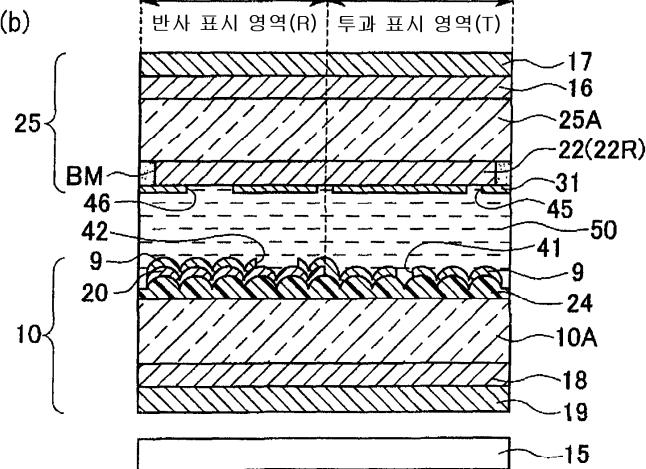
(a)



(a)

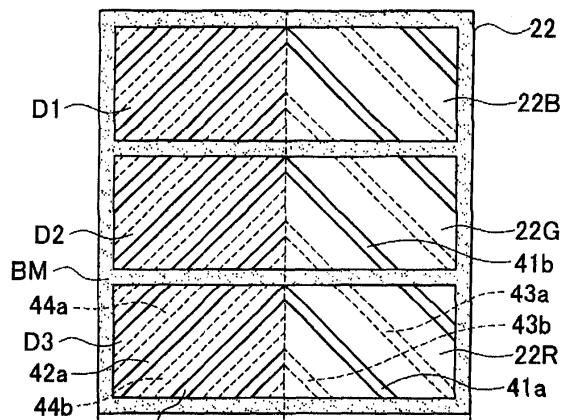


(b)

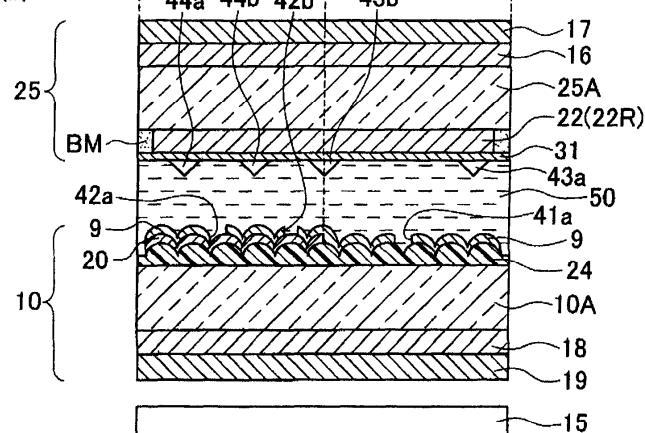


7

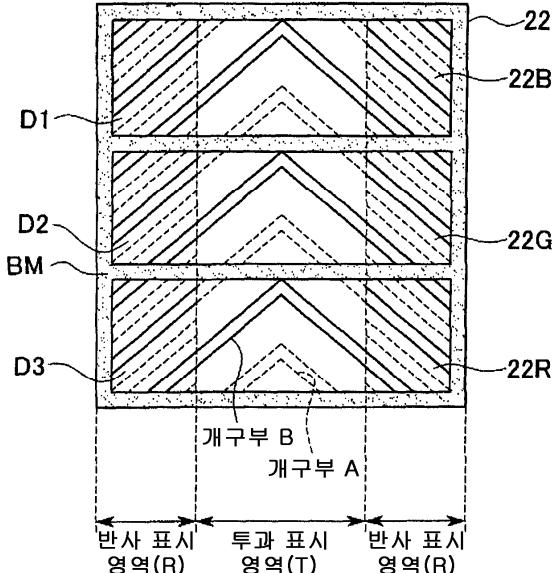
(a)

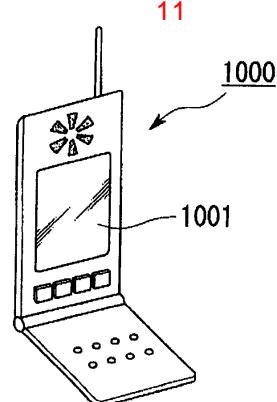
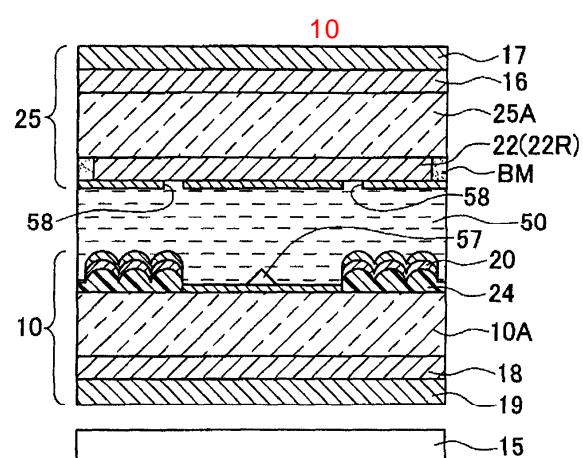
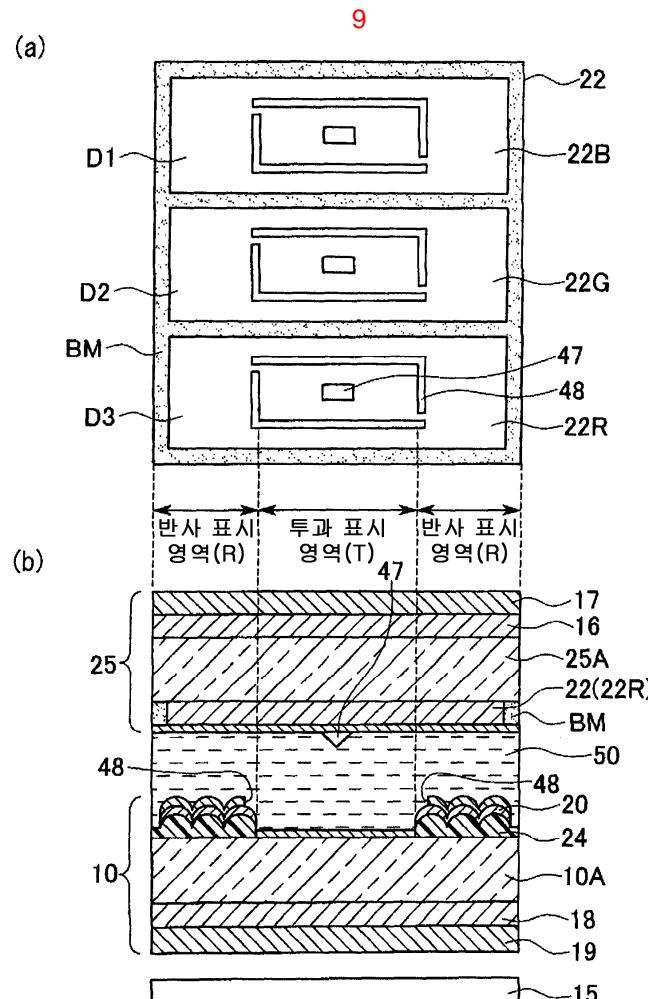


(b)



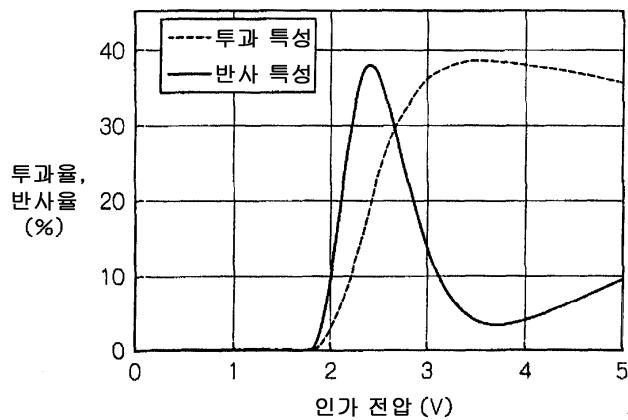
8



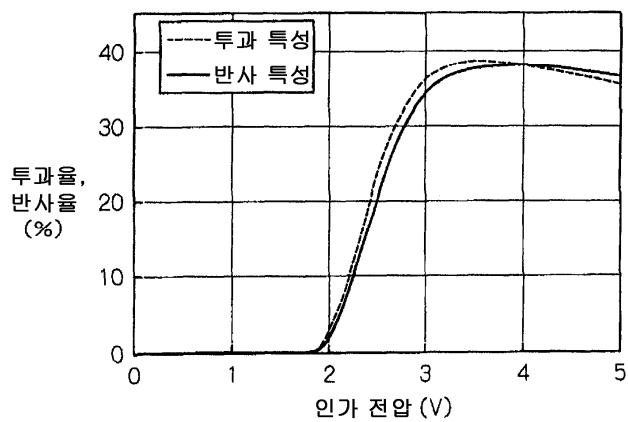


12

(a)



(b)



专利名称(译)	液晶显示装置和电子设备		
公开(公告)号	KR1020040055666A	公开(公告)日	2004-06-26
申请号	KR1020030093510	申请日	2003-12-19
[标]申请(专利权)人(译)	精工爱普生株式会社		
申请(专利权)人(译)	精工爱普生株式会社		
当前申请(专利权)人(译)	精工爱普生株式会社		
[标]发明人	OKUMURA OSAMU		
发明人	OKUMURA,OSAMU		
IPC分类号	G02F1/139 G02F1/1335 G02F1/1337 G02F1/13357 G02F1/1333 G02F1/1343		
CPC分类号	G02F1/133707 G02F1/133555 G02F1/1393		
代理人(译)	KIM, CHANG SE		
优先权	2002369954 2002-12-20 JP		
其他公开文献	KR100562599B1		
外部链接	<a href="#">Espacenet</a>		

### 摘要(译)

对于半透反射和反射型LCD，它很亮，对比度很高。而且，液晶显示器还可以提供宽视角的显示。本发明的液晶显示器在一个点区域D1和反射显示区域R内配备有渗透指示区域T，液晶层(50)保持在一对基板(10,25)之间。其中液晶层(50)的初始取向条件显示垂直取向的介电各向异性包括可否认液晶。在一对基板(10,25)的液晶层(50)中准备用于驱动液晶的电极(9,31)。并且在该电极(9,31)中，在反射显示区域R和渗透指示区域T中的每一个中准备开口部分(41,42)和凸起部分(43,44)。开口部分的开口面积(41)凸部(43,44)的基板面方向占据面积比反射显示区域R中的透过指示区域T构成。

