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2004 10 28

(21) 10-2003-0024896
(22) 2003 04 19

(71) . 20

(72) 967-14

474-3

(74)

(54)

가

9

, , , , Ag

1

2

4a 4b

5

6a 6b 5 |~|'

7 가

8

9

10 8 ~ ' 가

Ag

110 ·

110a : 120 :

120a/120b : / 130 : 1

135 : 1 140 :

150 : 1 160 :

170 : 1 180 :

200 : 210 :

220 : 230 : 2

235 : 2 240 : 2

가

가 , LC
D(Liquid Crystal Display Device), PDP(Plasma Display Panel), ELD(Electro Luminescent Display), VFD(Vacuum Fluorescent Display) 가 가 ,

CRT(Cathode Ray Tube)

LCD가 가

가

가

가

1, 2

1, 2

1

(TFT

)

가

2

(
R, G, B

가 가

가

(Active Matrix LCD)가

가

1

1
(3)

(1)

(2)

(1)

(2)

(5)
(4)

(1)

(4)

(P)

(5)

(P)
(T)가

(6)

R, G, B

(2)

(P)

(8),

(9)

(7)

(5)
(4)

(6)

(ITO : Indium Tin Oxide)

(6)

(3)

(3)

(T)

가

(3)

(2) (9)

(In-Plane Switching Mode)

가

2
 2 (10), (10) (13) (20) (15) (3) (10)
 (13) (15)

3a 3b (off)/ (on)

가 3a (13) 3b (15) 가 3a (13) 45 ° (off) (15) 가 3 (3) (on) (13)

(15) (13) (15)

/ 70 ° 가 / /

(13) (15)

4a 4b

4a , (13, 15) 가 , (13, 15) () 가 , (13, 15) 4b
 , (13, 15) 가 , (13, 15) 가 , (13, 15)

4a

가

, 4b , (13) (15) (13, 15) 가

가 가

5 , 6a 6b 5 |~|' 가

5 6a, 6b , (10, 20) , (10) (20)

1
2 , 1 , 가

,
1 1 , 1 , 1 ,

2 2 , , 1 (bar) , 가

(Ag), (Al), (AlNd)

1, 2 가

1, 2 Ag

1 1

1

2 2 가 1 가 1 가 ,

1, 2 1, 2 Cu, Cr, Mo, Al, Ti, Ta, Al

1, 2 1, 2 , , - , - ,

, , , , 1 , , 1 , 1 , 1 ,

1 2 (bar) , 가

(Ag), (Al), (AlNd)

1, 2 가

1, 2 Ag

1 1

1

1, 2 1, 2 Cu, Cr, Mo, Al, Ti, Ta, Al

1, 2 1, 2 , , , ,

, 7 가

7 , () () 2 1 (230) 2 (130) 1 (250) (150) (),
가 가 (130, 230) (150, 250) 가 .

8 , 9 , 10 8
~ 가 ,
Ag

8 11 , (100, 200) , (100) (200)
(), (300)

8 (120) , (100) , 1 1 (130) 1 (130) 1 (150) (150) (110)
(), (130), (130), (150) (150)

, 1 1 (130) 1 1 (150) 1 (135) (120b) , ,
가 , (130) 1 1 (150) (150) 가 가 , ,
가

, (100) (110) (10 140) (110a) , (110a) (110a) (110a)
80) , (180) (120b) (120) , (120a) (120a) (120a) (120a)
(1)

, (110a), (TFT) (), (180), (120a) (120b)
(120b)

, (TFT) (120b) 1 (150)

9 , 2 (200) 2 (230) 1 2 (130) (250) 1 (150)

10 , (200) , (210) , (R, G, B) (230) , 1 (220) ,
2 (100) 1 (130) 2 (230) , 1 (150)

, (200) 2 (250) 1 (150) (bar)(260)
 , (120b) 가 1, 2 (135) 2 (235) 1 Ag (135),
 가 (200) Ag (270) 가 .
 , 8 11
 , (100) (110) , (100) (110a) (180)
 , (120a, 120b) (110) (120) (120) (180)
 , (110), (120) Cu, Cr, Mo, Al, Ti, Ta, AlNd Al
 , (120) (100) 1 (140) , 1
 (130) .
 , 1 (130) 1 (110) (120) (110) (120)
 , (120b) 1 (130) (160) ,
 (160) 1 (140) (PhotoAcryl) BCB(BenzoCycloButene),
 (Polyamide)
 (130) (200) (100) (110) (120) 1
 , , 1 (150) 1 (150) 1 (130)
 , 1 (150) , (bar)(260) (200, 100) (260) (Ag), (Al),
 (AlNd)
 , (260) , (100, 200) (150, 250)
 , (260) (150, 250)
 , (R, G, B) (200) (210) (210) (220)

	(100)	1	(130)	2	(230)
, 2	(240)	(200)			
,	(100)	1	(150)	2	(250)
,	(130, 230)		(150, 250)	,	,
I, Ti, Ta, AlNd	Al	가	,	,	Cu, Cr, Mo, A
	(100, 200)		(150, 250)		(130, 230) (Normally Black)
,		가	,	(130, 230)	,
,		,			(150, 250)
,	(100)		,	()	가
,	(260)		,		(260)
,		(260)	,	(130, 150)	
, Ag	(270)가	(235)	1, 2	(130, 230)	
,	(260) Ag	(270)		(100, 200)	
,	(100)	(200)			(300)
가	가		(130, 230)	(150, 250)	
		가		,	
,	(150, 250)		(TFT)		가
,	(130, 230)			(120b)	가
가	가				
,					
,					
,					
,					
Ag	가	가	가	가	가

(57)

1.

;

;

1 ;

1

1 ;

2

2.

1 ,

1

2

(bar)

가

3.

2 ,

(Ag),

(Al),

(AlNd)

4.

1 ,

1, 2

가

5.

4 ,

1, 2

Ag

6.

1 ,

1

1

7.

1 ,

8.

1 ,

9.

1 ,

1

10.

1 ,

2

2

가 1
가

1

가 ,

11.

1 ,

1, 2

1, 2

Cu, Cr, Mo, Al, Ti, Ta, Al

12.

1 ,

1, 2

1, 2

, - , - , -

13.

;

;

1

;

1

1

;

1

2

;

1

2

;

14.

13 ,

1

2

(bar)

가

,

15.

14 ,

(Ag),

(Al),

(AlNd)

16.

13

1, 2

가

17.

16

1, 2

Ag

18.

13

1

1

19.

13

20.

13

1

21.

13

1, 2

1, 2

Cu, Cr, Mo, Al, Ti, Ta, Al

22.

13

1, 2

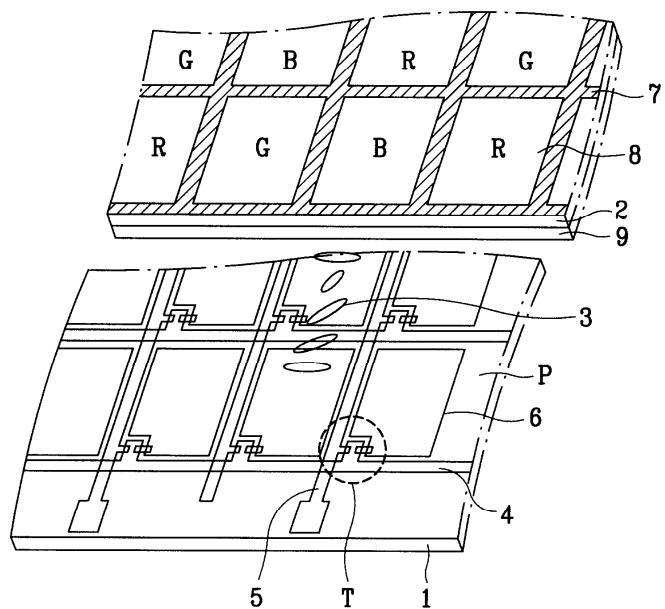
1, 2

, , - , - , -

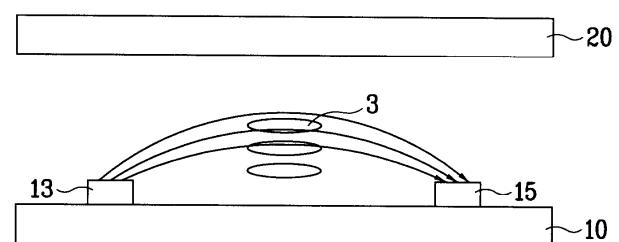
,

-

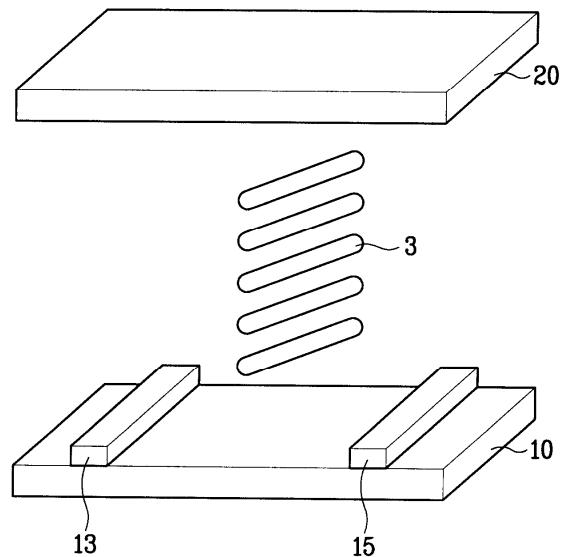
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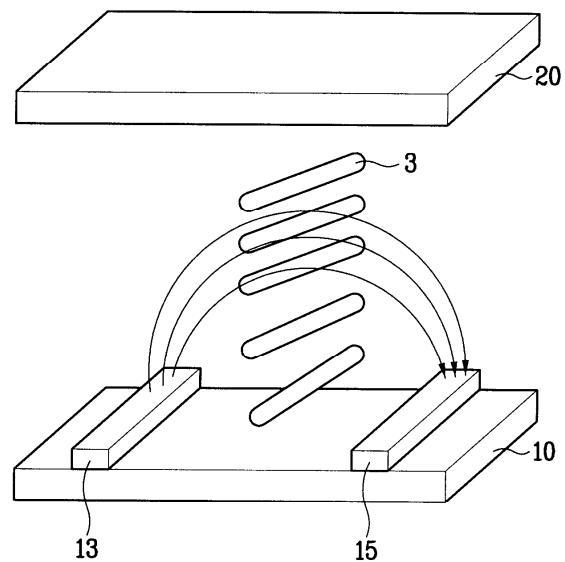
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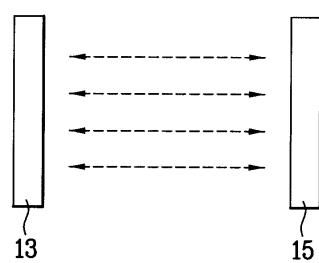
3a



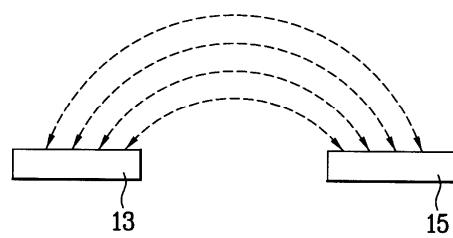
3b



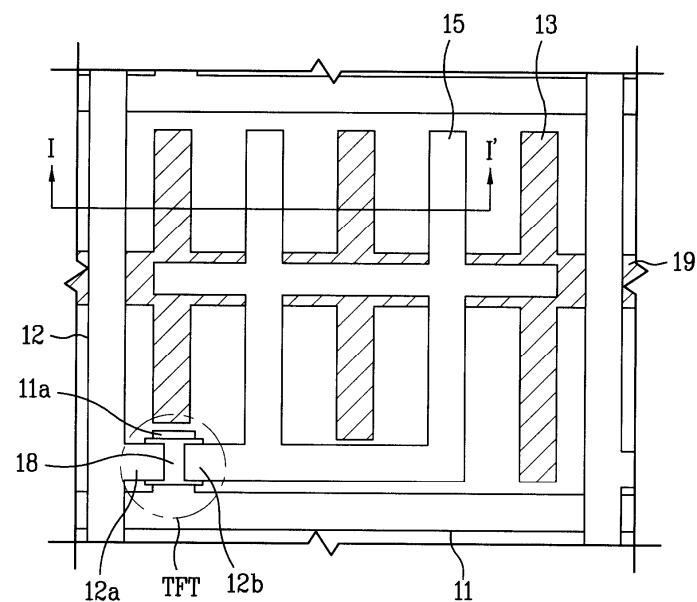
4a



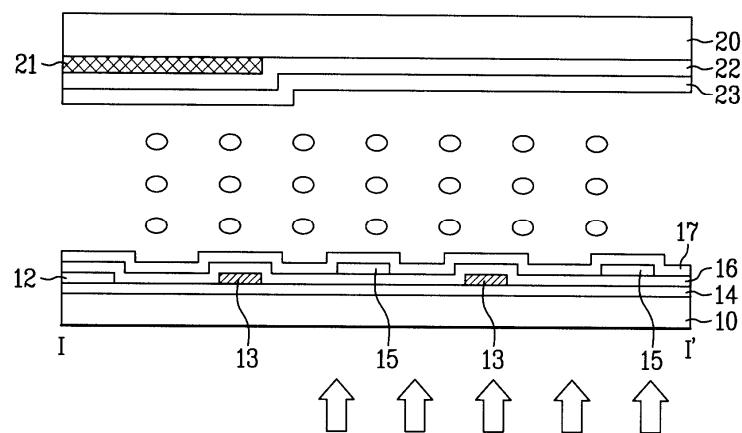
4b

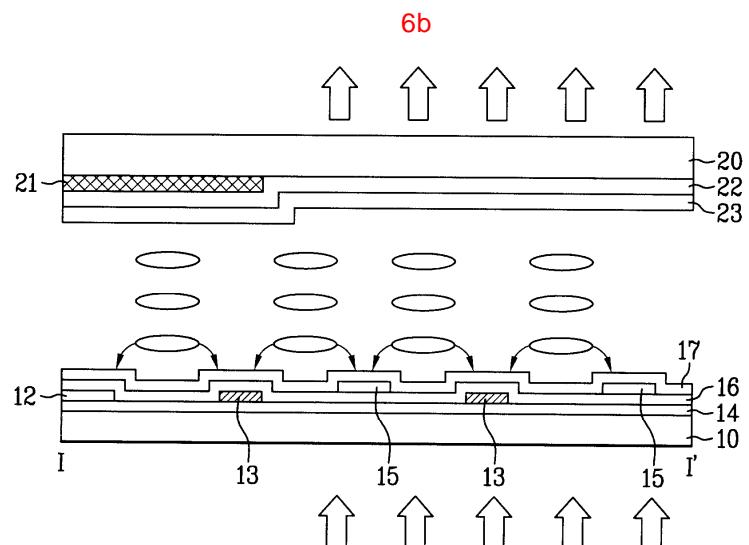
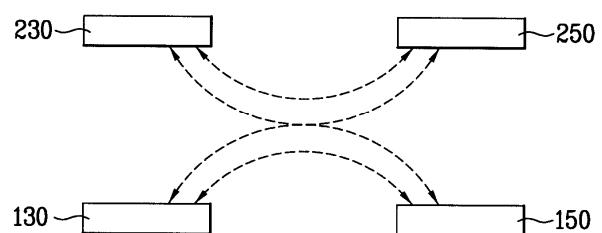
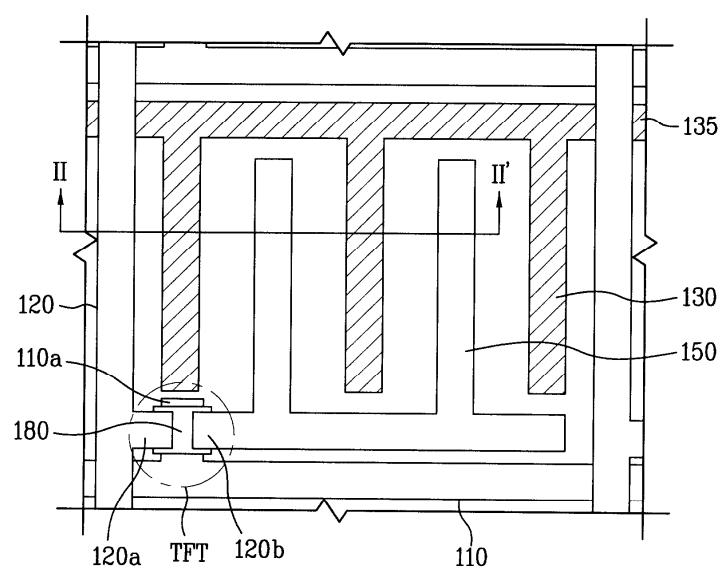


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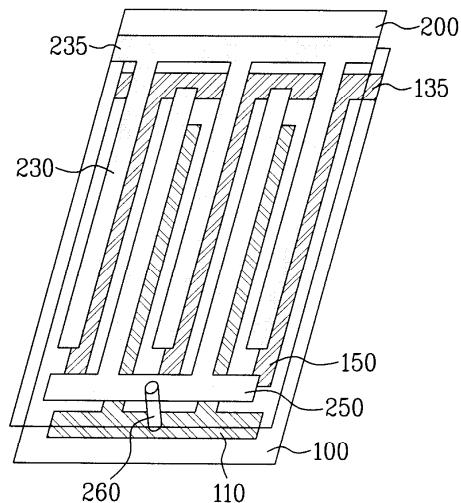


6a

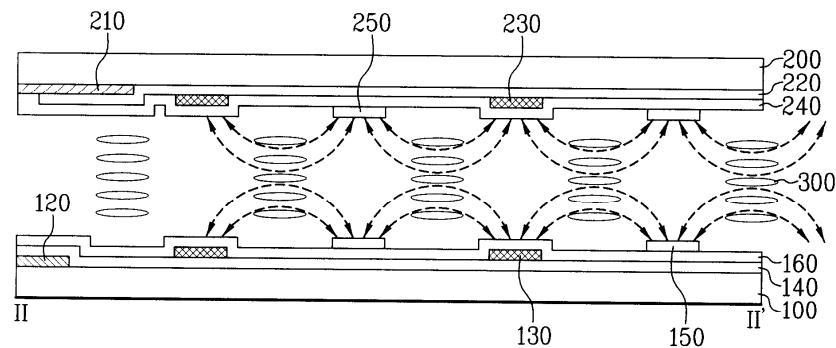


**7****8**

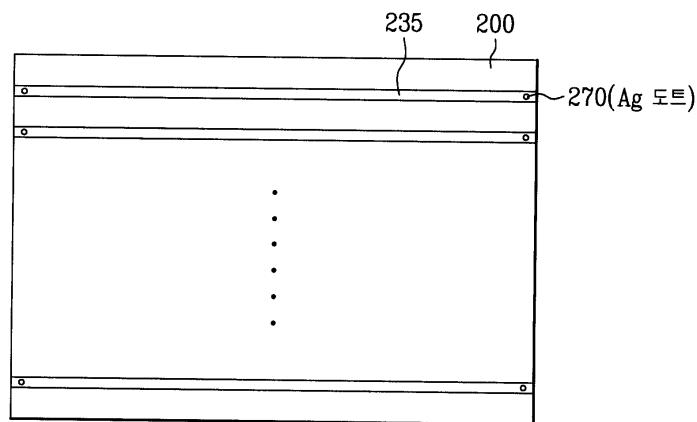
9



10



11



专利名称(译)	横向电场型液晶显示装置及其制造方法		
公开(公告)号	KR1020040091184A	公开(公告)日	2004-10-28
申请号	KR1020030024896	申请日	2003-04-19
[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	JIN HYUNSU 진현석 JEONG WOONAM 정우남		
发明人	진현석 정우남		
IPC分类号	G02F1/1343		
CPC分类号	G02F1/134363		
代理人(译)	金勇 新昌		
其他公开文献	KR100698047B1		
外部链接	Espacenet		

摘要(译)

本发明涉及面内切换模式LCD及其制造方法，它将上下面板上的公共电极和像素电极形成为相同的形状，并以此方式降低每个电极中授权的驱动电压并降低功率消费。并且，与本发明的面内切换模式液晶显示装置平行的方向是下板和上板以及与下板垂直交叉并限定像素区域的数据线和数据线，包括：具有固定间隔和分支的第一公共电极形成在像素区域中，并且具有固定间隔和分支的第一像素电极形成在如上所述的分支的第一公共电极与第一公共电极和第一像素电极之间，并且第二公共电极和第二像素电极形成在上板上，以分别对应于形成在上部和下部基板之间的液晶层。公共电极，像素电极，导电条，平面切换，Ag点。

