

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

(51) 。 Int. Cl. ⁷
 G02F 1/136 (11) 2002 - 0017437
 (43) 2002 03 07

(21) 10 - 2000 - 0050773
 (22) 2000 08 30

(71) .
 , 20

(72) 915 3 105 702

(74)

:

(54)

, ,
 1 2 , 1 ,
 , , 1, 2 , , 1,
 2 , , 1, 2 , ,
 , , , , , , , ,

3

1
 2 1 A - A'
 3
 4 3 A - A'
 5 3 B - B'
 6a 6d

30,50 : 1, 2 31 :

33 : 35 :

37 : 38 :

39,39a : 1, 2 41 :

43 : 51 :

53 :

,

(CRT: Cathode Ray Tube),
 , CRT

가 .

CRT , (Liquide Crystal Dispaly: LCD) 가
 , 가

가 .

,

(TFT - LCD)
 VGA(Video Graphic Array; 640 × 480)

SVGA(800 × 600), XVGA(1024 × 768)

TFT - LCD 가, 가 가 , 가 가

TFT - LCD 가 , (Contrast ratio) 가 , (Twisted nematic)
 가 , (Munti domain) 가 .

$$1 \qquad \qquad \qquad , \quad 2 \quad 1 \quad A - A'$$

$$1 \quad 2 \quad , \quad (1) \quad (2) \quad 1 \quad (10)$$

(3) , (1) , (1) / (2)
 , , , , / (TFT)가

$$(8) \quad (9) \quad (2) \quad , \quad (8)$$

$$(3) \quad (9) \quad (\text{Overlap}) \quad .$$

$$(9) \quad (3) \quad , \quad (8) \quad (12) \\ (7) \quad . \quad , \quad (8) \quad (12) \quad (13)$$

$$_2 \quad (20) \qquad \qquad \qquad (21) \qquad , \quad 1 \quad (10) \quad 2 \quad (20) \qquad \qquad \qquad (22)$$

, , (10,20) 가 ,
(10,20) .

(), 가 , (8) (9) (10,20)
 가 . , (22) 가 . , 가
 , (22) .
 ray scale) 가 , 가 . (G)

(Repair line) (Open) , (Repair)

, 가

2 , 1
가
1 , 2
1 , 2
1 , 2
1 , 2
1 , 2
1 , 2
1 , 2

(Open) (Re
pair) . , ,
ypass) , (Path) .

, , (Open) ,
가 (Open) .
, (O
pen)

$$3 \quad \quad \quad . \quad \quad \quad 4 \quad \quad 3 \quad A - A'$$

$$\begin{aligned}
& , \quad 3 \quad & , \quad 1 \quad (30) \quad & & & & (31) \\
& \quad (33), \quad & & (31) \quad & & (35) \quad , \\
& (31) \quad & (33) \quad & & (TFT) \quad , \\
& & & (33) \quad & & (37) \quad , \quad (35) \\
& & & & & , \quad \text{가} \\
& 3) \quad & 1, \quad 2 \quad & (39,39a) \quad & (41) \quad & . \\
& & & & &
\end{aligned}$$

, (Open) 가 . , (33), 1 (39), (41), 2 (" 가"
) (39a) , (Path) . (33), 1 (39), (41), 2 (" 가"
 2 (39a)

	1	(30)	1	(39)	2)
1		(39)	(41)	,	(41)	
	(43)	,	(43)	1	(39)	
(33)	,	(33)			(43)	(37)
,		(37)	(33)		(38)	.
	1,	2	(39,39a)	(41)		ITO(Indium Tin Oxi
de)			.	(41)	1	
			,	(37)	(30)	
	(35)				(43)	/
2	(50)	,	(51)	,	1	(30)
)				2	(50)
.	,		,	(30,50)		
,		(30,50)				
	(33)	1,	2	(39,39a)	(33)	(3 " 가")
3	" , " , ")	,	(41)	(raser welding)	(3 " , " , ")
	(raser)			(35)	.	
" ,		(cutting)			.	
,		가		(33),	1	(39),
(41),	2	(39a)		(33)		(35)
						.
	6a	6d	3 A - A'	6a	6d	
	6a	,	1	(30)	Al, Mo, Ta, Al	ITO
(Sputtering)		,	(35)	.	(Photolithography)	
,	(41)		(41)	,	(35)	(31),
,						
	1	(39)	2	(39a)()	1
(39)	2		(41)	,	,	(41)
,						
	6b	,		SiN _x , SiO _x ,	CVD(Plasma chemical vapor	
deposition)		,		(43)	.	
	6c	,	(43)	Al, Cr, Ti, Al	,	
	,	(31)	1	(39)	2	
	(33)	,	(33)		(37a)	
	6d	,	(33)	(37)	SiN _x , SiO _x ,	
	,	(Acryl)			(38)	
	BCB(Benzocyclobutene)					
	2	(50)				

가 , 1 (30) 2 (50) , PVA(Polyvinylalcohol), 가 , (Polyamicacid)
 amide), (Polyimide) , (Polysiloxanecinnamate),
 , (Polyvinylcinnamate) (Cellulosecinnamate) , , 1 ,

, (33) (39,39a) , (33) (Open)
 (33) 1, 2 (39,39a) (raser welding)
 , 1, 2 (39,39a) (41)
 (35) (39) (41)((33)) 2 (39a) (33)
 3) 1 , (Repair) .

(57)

1.

1 2 ;

1

;

가

;

1

2

2.

1 , 1, 2

3.

1 , 1, 2

4.

1 , .

5.

1 , , , 1, 2

6.

1 , , , ; 1,

1, 2 ;

1, 2 ,

가 ;

;

1 2

7.

6 , .

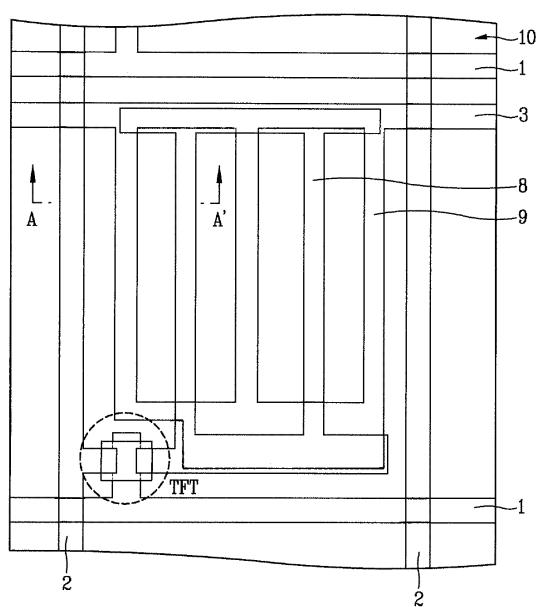
8.

6 , , , 1, 2

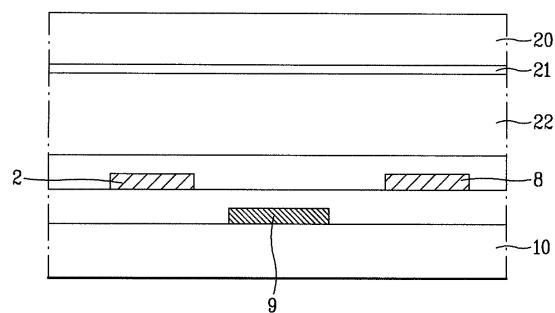
9.

6 , 1, 2 ITO

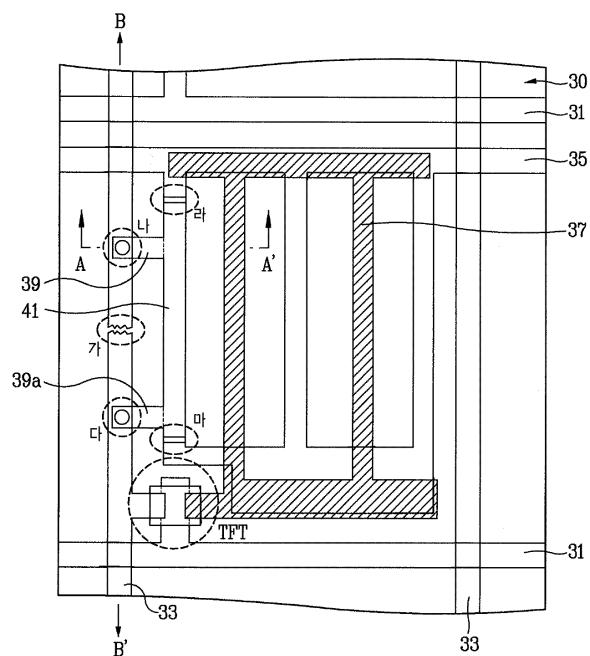
1



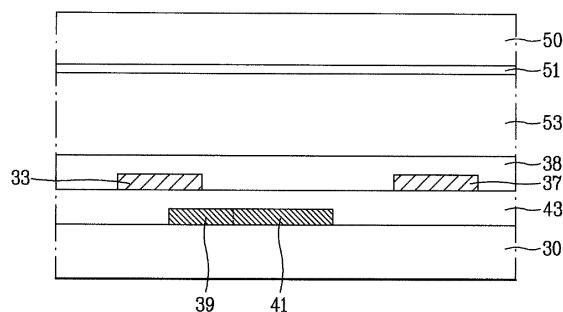
2



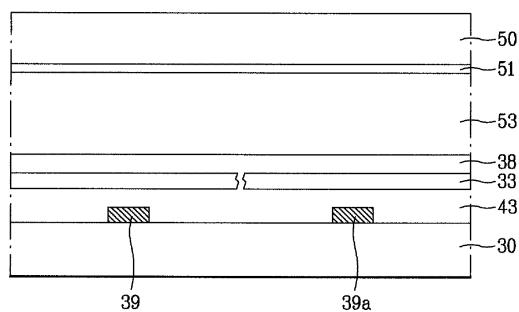
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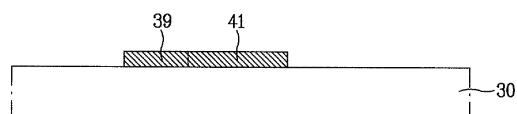
4



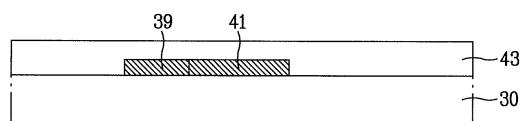
5



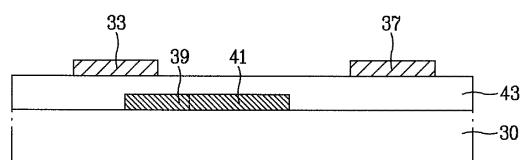
6a



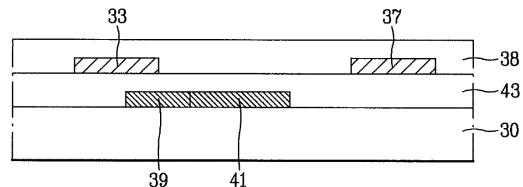
6b



6c



6d



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	KR1020020017437A	公开(公告)日	2002-03-07
申请号	KR1020000050773	申请日	2000-08-30
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当前申请(专利权)人(译)	LG显示器有限公司		
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IPC分类号	G02F1/1343 G02F1/1362 G02F1/136		
CPC分类号	G02F1/136259 G02F1/134363 G02F2001/136272		
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其他公开文献	KR100587366B1		
外部链接	Espacenet		

摘要(译)

本发明涉及提供一种面内切换模式液晶装置，该液晶装置比较数据线的开路并在工艺中形成虚设图案，这样就可以更容易地修复数据线及其制造方法。并且它包括在多个公共电极和数据电极的两侧重叠的第一虚设图案和第二虚设图案：限定一个像素区域的数据线，同时由公共电极和布置为长度和宽度的栅极布线组成。第一基板和第二基板：第一基板，其布置成使得本发明的面内开关模式液晶器件插入液晶层并且形成在数据线上的像素区域内：栅极布线和第一基板用数据线定义的基板和在平面切换中授权第二虚设图案面对数据线和第一虚设图案，第二虚设图案使用激光在数据线的开路中电连接。第一和第二虚设图案的公共电极与公共线绝缘。这样就不能形成单独的修复线，并且可以很容易地修复数据线的开路故障。公共线和虚设图案。

