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G02F 1/133

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(11)
(24)

2004 09 04
10-0447225
2004 08 25

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(22) 2001 10 13

(65)
(43)

10-2003-0031278
2003 04 21

(73) .
20

(72) 501 201

2 396

(74)

:

(54)

가 2 가
2 .

4

1
2 1 I-I'

3			2	
4		1		
5	4	-	'	1
6		2		
7	6	-	'	2
8		3		
9	8	-	'	3
10		4		
11	10	-	'	4

(liquid crystal display device)

[illegible]
$$1 \quad , \quad 2 \quad 1 \quad | - |'$$

(10) (1a) (1) (10) (1) (4) (1a) (4) (1) (2a) (2) (2b) (2a) (3) (2b) (5) (6) (6) (Cdp)가 (Cdp) DC (loss) (charging)

[1] $\Delta Q = \Delta(Vd1 - V1) * Cdp * f$ 가 V1 가 , f (charging)

[1] 1 가 . 가 가

3 2 . Vd1, Vd2, Vd3 V1, V2 (P1, P2) 가 , Cdp1_L, Cdp1_R, Cdp2_L, Cdp2_R (P1, P2)

[2] $\Delta Q (P1) = Cdp1_L * (Vd1 - V1) + Cdp1_R * (Vd2 - V1)$
 $\Delta Q (P2) = Cdp2_L * (Vd2 - V2) + Cdp2_R * (Vd3 - V2)$

[2] (Line inversion) 가 V1 V2가 (Gray 31) 가 , (date signal)(Vd1, Vd2, Vd3) 가 가 , V1 = V2 = V, Vd1 = Vd2 = Vd3 = Vd가 가

[3] $\Delta Q (P1) = Cdp1_L * (Vd - V) + Cdp1_R * (Vd - V)$
 $\Delta Q (P2) = Cdp2_L * (Vd - V) + Cdp2_R * (Vd - V)$
 $|\Delta Q (P1) - \Delta Q (P2)|$
 $= (Cdp1_L - Cdp2_L) * (Vd - V) + (Cdp1_R - Cdp2_R) * (Vd - V)$
 $= \{(Cdp1_L + Cdp1_R) - (Cdp2_L + Cdp2_R)\} * (Vd - V)$

(Dot inversion) 가 V1 V2 (Gray 31) 가 (Vd1, Vd2, Vd3) 가 가 ,

V1 : (+) , V2 : (-) | V1 | = | V2 | = V ,
Vd1 : (+), Vd2 : (-), Vd3 : (+), | Vd1 | = | Vd2 | = | Vd3 | = Vd가 . 가

[4] $\Delta Q (P1) = Cdp1_L * (Vd - V) - Cdp1_R * (V - Vd)$
 $\Delta Q (P2) = Cdp2_L * (Vd - V) - Cdp2_R * (V - Vd)$
 $|\Delta Q (P1) - \Delta Q (P2)|$
 $= (Cdp1_L - Cdp2_L) * (Vd - V) + (Cdp1_R - Cdp2_R) * (V - Vd)$
 $= \{(Cdp1_L + Cdp1_R) + (Cdp2_L - Cdp2_R)\} * (Vd - V)$
 $\frac{\{(Cdp1_L + Cdp1_R) - (Cdp2_L + Cdp2_R)\} * (Vd - V)}{\{(Cdp1_L + Cdp1_R) + (Cdp2_L - Cdp2_R)\} * (Vd - V)}$

가 2

2

2

(6a, 6b) (2) 가

(2) (1) (2) (6a, 6b) 2 (1a) (width)(1/2)

가

(Cpd) 가

(Cpd)

(Cgs) (Cgd)

(Cgs/Cgd)가

(Cgd) (Cgs/Cgd)

4 1 5 4 - 1

1 4 5 (10) (1a)

(1a) (1) (4) (1a) 가

(4) (1) (10) (4) (3) (2a) (2) (2) (3) (6a,

b) (2) (1a) (2b) (2) (5) (1) (10) (1a) 가

6b) (2b) (2b) (2) (5) (1) (10) (1a) 가

(6a, 6b) (1)

6 2 7 6 -

2 2 1 2 (6a, 6b)

가 (2) (2) (1)

(2) (2) (1)

2 6 7 (10) (1a)

(1a) (1) (10) (4) (3) (1a) 가

(4) (1) (10) (4) (3) (1a) 가

(2) (3) (1) (2a) (1a) (4) (2) (2a)
 (3) (1a) (2b) (2a) (3) (2)
 b) (2b) (2) (5) (6a,
 6b) (6a, 6b) (1)
 1, 2
 8 3 9 8 - ' 3
 10 4 11 10 - ' 4
 3 1 8 9
 (10) (1a) (1) (4) (1a)
 (1a) 2 (1) (10) (가 (3a) (3a)
 (4) (4) (3a) (가 (1) (3a) (2a)
 (가 (4) (2a) (2) (1a) (3a)
 (1a) (2) (3a) (2b) (2b)
 (2a) (5) (6a, 6b) 10 11
 (2) 4 (1a) (1) 2
 (10) (1a) (가 (4) (1a)
 (4) (1) (10) (가 (3a) (3a)
 (가 (4) (2a) (2) (1a) (3a)
 (1a) (2a) (3a) (2b) (2b)
 (5) (6a, 6b) (2b)
 (2) (가
 2
 2 가
 2 가 가

(57)

1.

가

가 2

2.
2.

3.

1 ,

2

4.

1 ,

5.

1 ,

6.

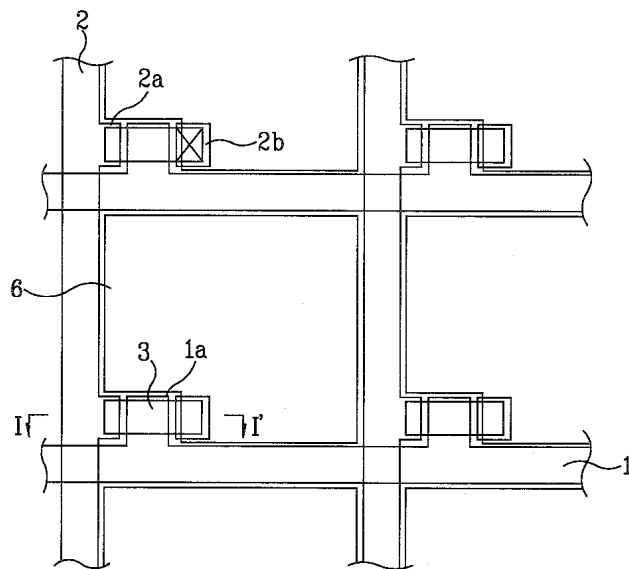
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7.

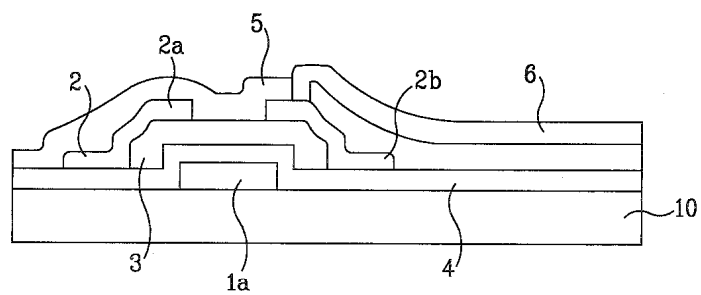
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2

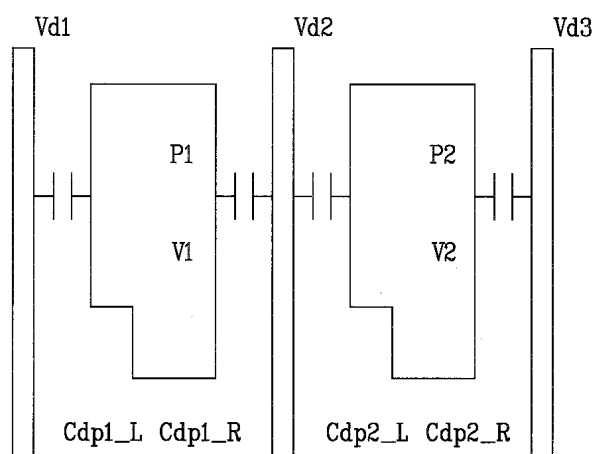
1



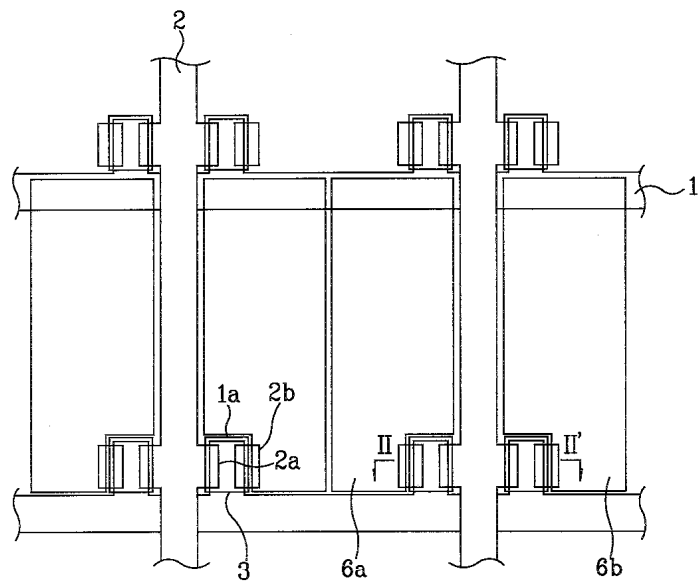
2

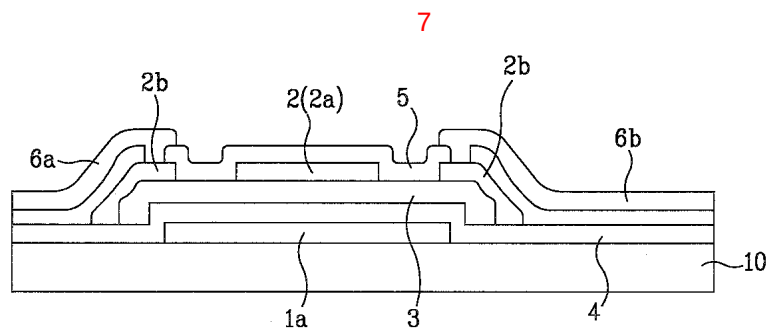
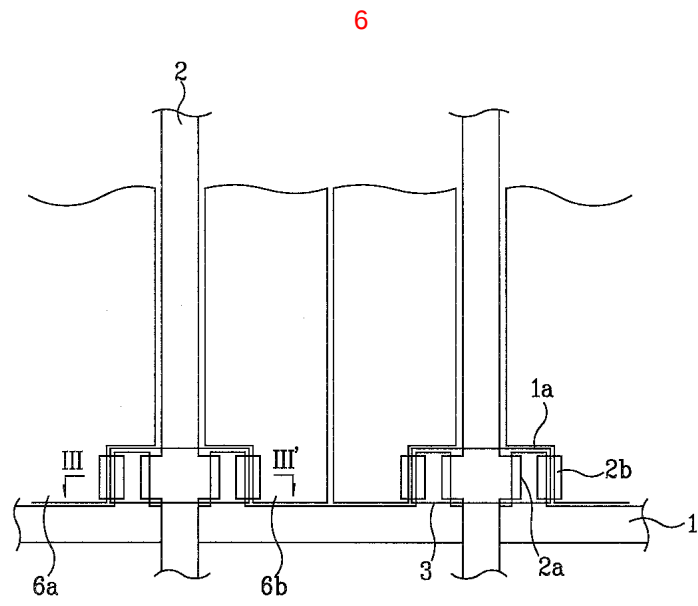
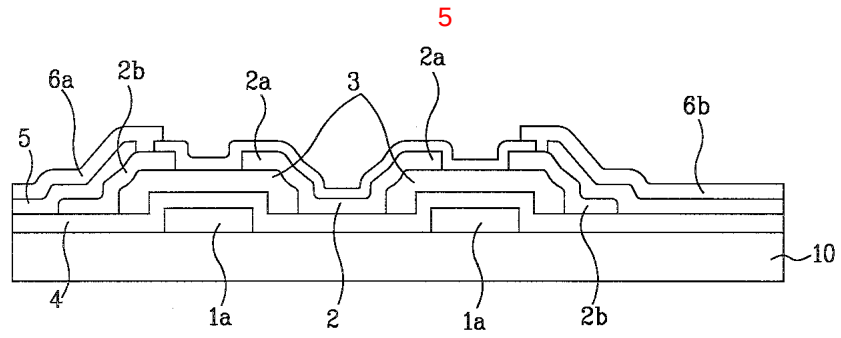


3

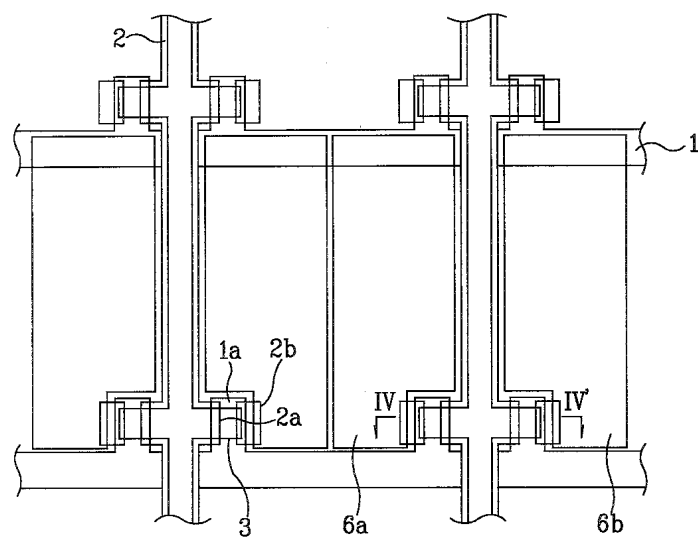


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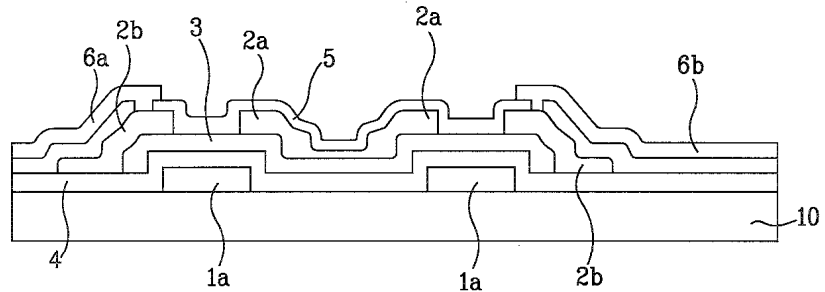




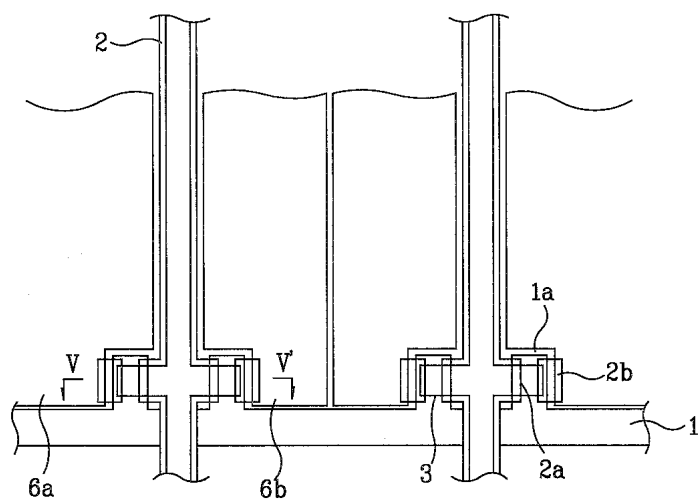
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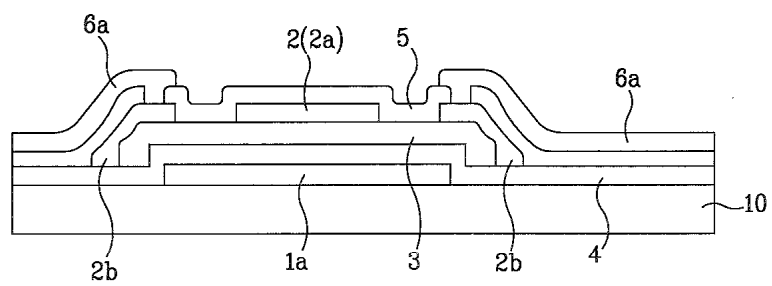
9



10



11



专利名称(译)	液晶显示器		
公开(公告)号	KR100447225B1	公开(公告)日	2004-09-04
申请号	KR1020010063200	申请日	2001-10-13
[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	CHOO KYOSEOP 추교섭 CHANG CHUNGOK 장정옥		
发明人	추교섭 장정옥		
IPC分类号	G02F1/133		
代理人(译)	金勇 新昌		
其他公开文献	KR1020030031278A		
外部链接	Espacenet		

摘要(译)

目的：提供一种液晶显示器，通过均衡像素电极两侧的寄生电容，减少点反转方法中垂直线的劣化。组成：包括栅电极（1a）的多条栅极线（1）以规则的间隙沿一个方向排列在玻璃基板上。在玻璃基板上形成栅极绝缘膜。在栅极绝缘膜上形成半导体层（3）。包括源电极（2a）的多条数据线（2）在垂直于栅极线的方向上形成在栅极绝缘膜上。一个像素电极被分成两个像素电极（6a，6b）。数据线排列在分开的部分。在数据线和栅极线彼此交叉的部分处，在数据线的两侧形成薄膜晶体管，使得像素电极由薄膜晶体管驱动。栅电极和源电极之间的寄生电容与左薄膜晶体管中的栅电极和漏电极之间的寄生电容之间的差异通过栅电极和源电极之间的寄生电容与寄生电容之间的差异来补偿。右薄膜晶体管中的栅电极和漏电极。

