

(19)
(12)(KR)
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(43)2002 - 0087738
2002 11 23(21) 10 - 2001 - 0026721
(22) 2001 05 16

(71) 3 416

(72) 302 801

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2	1	II - II'			,
3	1	III			,
4a		가			,
4b	4a	IVb - IVb'			,
5a		가			,
5b	5a	Vb - Vb'			,
6		2			,
7	6	VI - VI'			,
8		3			,
9	10	8 IX - IX' X - X'			.

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 2 1 II - II' 3 1 III
 4a 가 4b 4a IVb - IVb' 5a 가
 5a Vb - Vb' 5b

(10) 가 (28) 가
 (22), (22) 가
 (24) (22) (26) (28)
 가 (82) (6
 4) (10) (()
 (() (22. 24. 26)
 (28) 가

(10) (SiN_x) (30) (22, 24, 26)
 (28)

(24) (30) (40)
 (40) n n+
 (55, 56)

(55, 56) (30) 가
 (62, 65, 66, 68) (22)
 (62), (62) (55)
 (65), (62) 가
 (68), (65) (26) (65)
 (56) (66) (64)
 (28)

(62, 64, 65, 66, 68) 가 (40)
 (70)

(70) (66), (64) (68) (
 76, 72, 78) (30) (24) (74)

(70) (72, 76) (64) (66)
(82) (82) 가
(22) (85)
(70) (74, 78) (24) (68)
(86) (88)가 (82) (86, 8
8) ITO(indium tin oxide) IZO(indium zinc oxide)
(85) (82) 가
가 가
(85) (22) (82) (82)
가 (normally white mode)
(82) (82) 10V
가
(82) (85) (22)
(85) (22) 가 3 (85)
(85) (22)
2 (22) (85) (30) (70)
(22, 85) 가
4a 4b (62, 75, 66, 68) (30) (70)
(69) (85)
69) (22)
(85) 5a 5b 가 (r
ing)
6 7
6 2
5 VII - VII'
1
1 (22) 가 (26) 가
(281) 가 (281, 282)
(281) 가 (282)
(281, 282) (82) 가
(40) (26) (65) (26) 가
(55) (66) (26) (6
5) (56)

1 (85) (22) (85) 가 가 .

1 2 가 , 가

8 3 IX - IX' X - X' .

9 10 8 1 .

(22) 가 (82)

(22, 24, 26, 28) (30) (42, 48) (P) n (55, 56, 58)

(42, 48) (ohmic contact layer) (42, 48) (62, 64, 65, 66, 68) 가 .

(55) (62, 68, 65) (56)

(66) (58) (64) (5)

(42, 48) (C) (62, 64, 65, 66, 68) (48)

5, 56, 58) (42) (62, 68, 65), (56)

(64) (58) (C) (55) (65) (66) (42)

3 5a 5b (25)

1 3 (82) (85) (22) (25) (82) 5 - 1,000 μm^2

1 7 1 2

(10) 가 (22, 24, 26) (28, 281. 282)

(30), (40)

(26) (30) (40)

(62, 64, 65, 66, 68) 2 (64)

4a 4b (69)

, (62, 64, 65, 66, 68) 가 (26)
 (55, 56) (55, 56) (40) . ,
 (40) .

, 가 (10)
 (70) , (30) (24),
 (66), (64) (68) (74, 76, 72, 78)
 . , (64) (72) 가 .

, ITO IZO (76, 72)
 (66) (64) (22) (85) 가
 (82) (74, 78) (24) (68) (86)
 (88) .

, 3
 (42, 48), (55, 56, 58) (62, 64, 65, 66, 68)
 . , (30),
 , (C) 가 1 (C) 2
 가
 (42, 48) . , 2 1
 (C) (62, 65, 64, 66, 68) ,
 (55, 56, 58) .

(57)

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5 - 1,000 μm^2

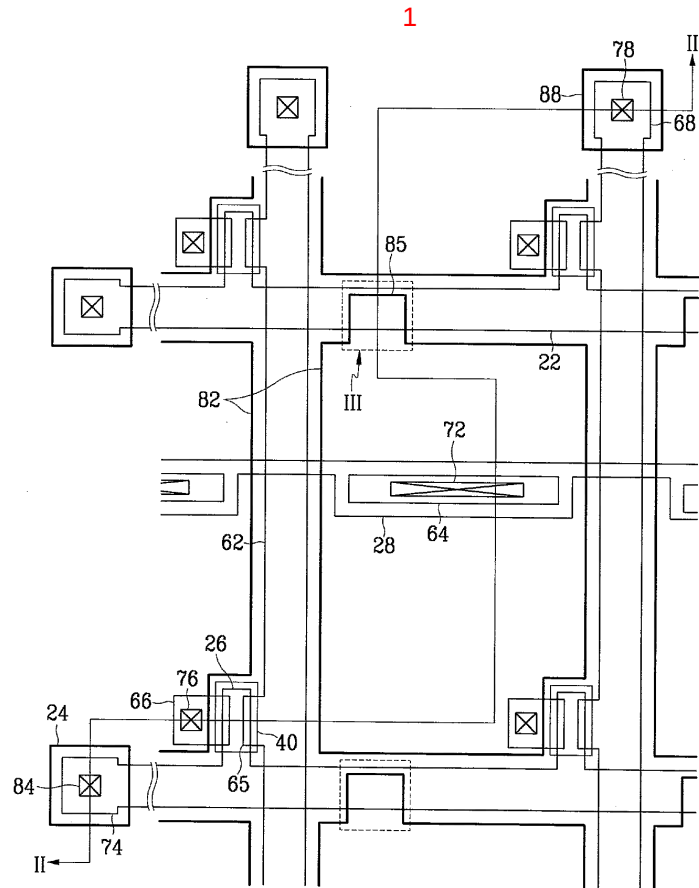
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11.

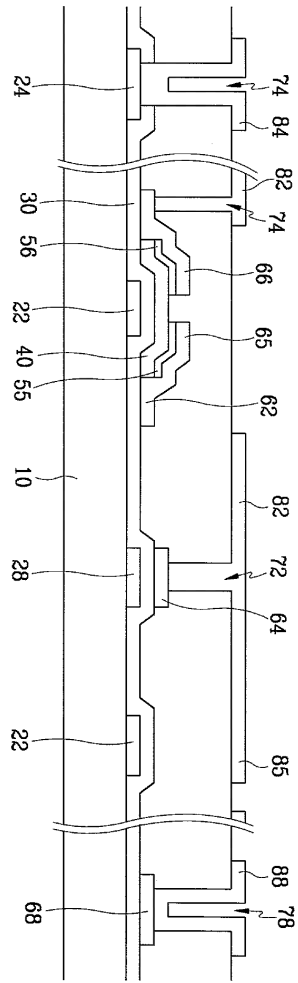
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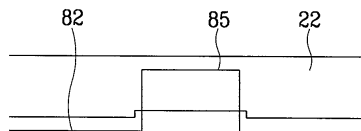
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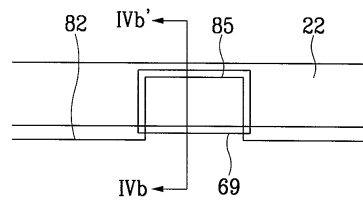
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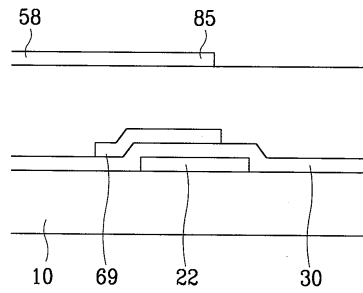
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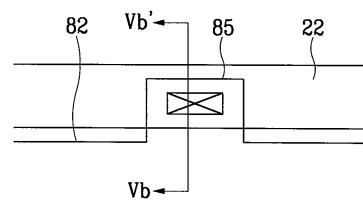
4a



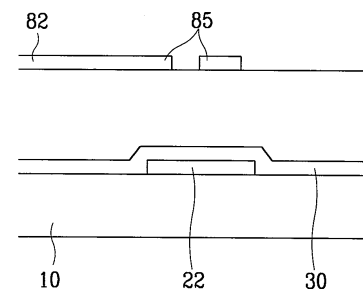
4b



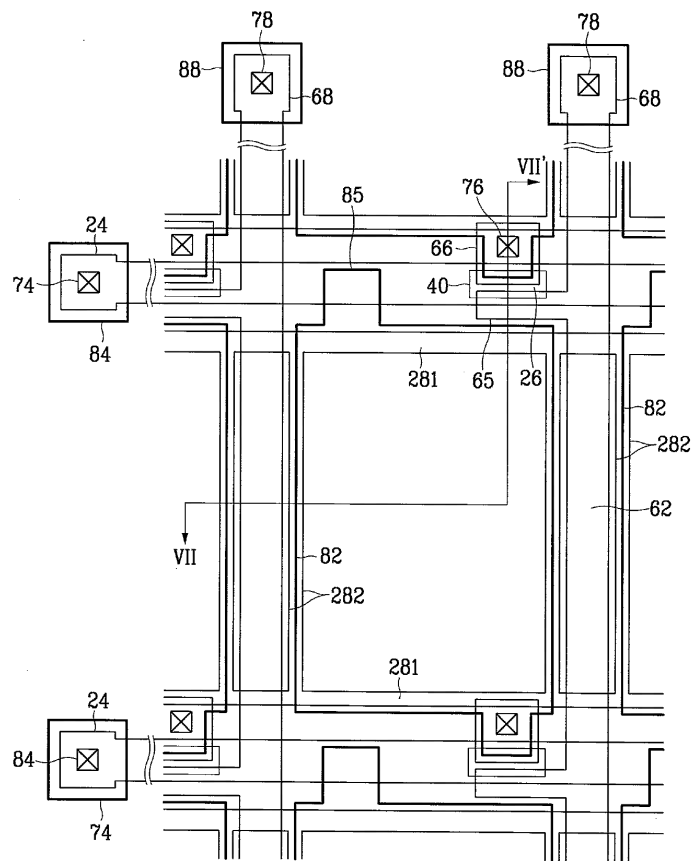
5a



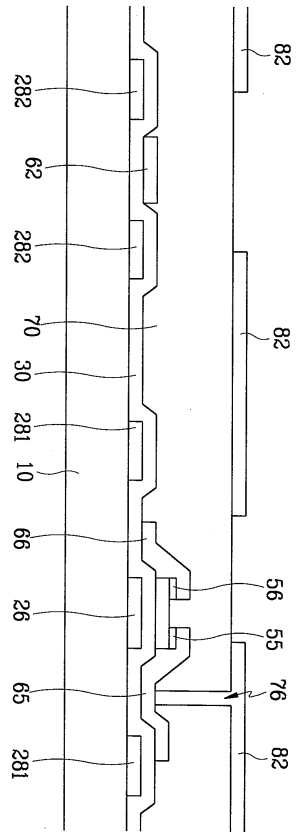
5b



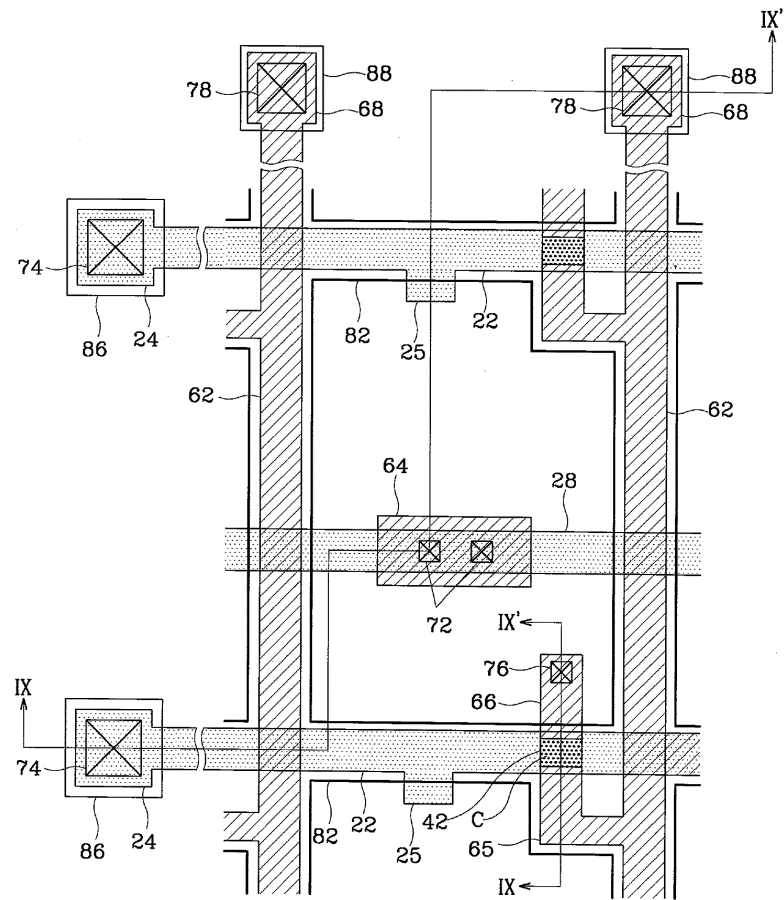
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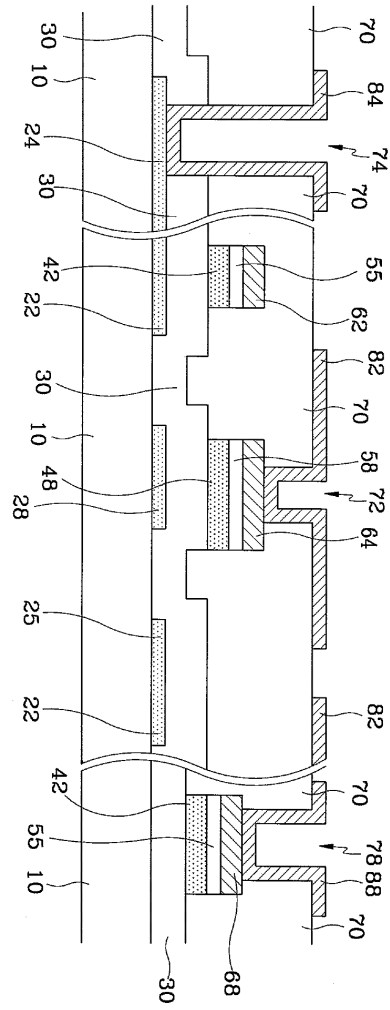
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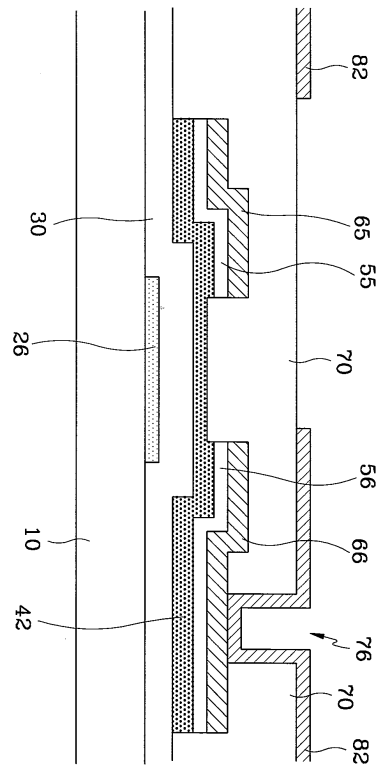
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专利名称(译)	一种用于液晶显示器的薄膜晶体管阵列基板		
公开(公告)号	KR1020020087738A	公开(公告)日	2002-11-23
申请号	KR1020010026721	申请日	2001-05-16
[标]申请(专利权)人(译)	三星电子株式会社		
申请(专利权)人(译)	三星电子有限公司		
当前申请(专利权)人(译)	三星电子有限公司		
[标]发明人	KIM DONGGYU		
发明人	KIM,DONGGYU		
IPC分类号	G02F1/136 G02F1/1362 G09F9/00 H01L29/786 G02F1/1368		
CPC分类号	G02F1/136259 G02F1/136213 G02F2001/136268 G02F1/136286		
代理人(译)	KIM , WON GUN		
其他公开文献	KR100796749B1		
外部链接	Espacenet		

摘要(译)

形成包括绝缘基板上的横向的栅极线的栅极布线，以及连接到栅极线的端部的栅极焊盘和连接到栅极线的栅极电极。并且形成用于保持容量的布线，其中在朝向横向扩展的同时输送公共电压。半导体层和电阻接触层形成在栅极布线的上部，栅极绝缘层覆盖用于保持电容的布线。并且数据线向纵向延伸，并且包括限定栅极线和像素区域的数据线，延伸到电阻接触层的上部的源电极，以及形成漏电极。漏电极与源电极分离在栅电极的上部形成源电极的相对侧电阻接触层。保护膜形成在数据线和半导体层的顶部，它们不覆盖。并且上部可以设置有具有接收部分的像素电极，该接收部分通过保护膜的接触孔连接到漏电极，并且其与剪切的栅极线突出并重叠。这里，接收部分具有容易地将像素改变为黑色故障的功能，其中在像素电极浮置或者传递公共电压的情况下不能识别，并且产生总是明亮地指示像素的白色错误。白色错误，黑色故障，断线，短路。

