

1a 1 .
1b 1c 1a lb-lb' , lc-lc' .
2a 2 .
2b 2d 2a llb-llb' , llc-llc' , lld-llid' .

< >

91 : 92 :
95 : 97 :
110 : 121 :
124 : 129 :
131 : 140 :
151, 154, 157, 159 : 161, 162, 163, 165, 169 :
171 : 173 :
175 : 177 :
179 : 190 :
1711 :

가
(Thin Firm Transistor, TFT)

(Coupling Capacitance)

가 , 가

1a , 1b 1c 1a l
b-lb' , lc-lc'

1a 1c , (110) 1 (211, 241, 251) 1
(212, 242, 252) (121, 124, 125) 1
(211, 241, 251) 1 (212, 242, 252) (110)
(121, 124, 125) 가 (121) (124)
(129)
(110) (131) (131) 가
(131) (131) (135) (91)가
(131)
(110) (190) 가 (91)
(135)
(91) (171) ITO (99)
(91)
(121, 124, 125) (131) Al, Al , Ag, Ag , Cr, Ti, Ta, Mo
1 (211, 241, 251) Al Ag
(212, 242, 252) (121) (131)
(121, 124, 125) 1 (211, 241, 251) Cr (212, 2
42, 252) Al 1 Al ITO (99)가 1 (99)
Cr Al Cr ITO (91) ITO (99)
(121, 124, 125) (131, 135) (140)
(124) (140)
(151, 154, 159) , n (16
1, 163, 165, 169)
(161, 163, 165, 169) (140) (171, 173, 175, 177, 179)
(121) (1711) 1 1 (171
1) (121) (1900) (1900) (1900)
(121), (1711)
(121), (1711) 3 가
(171, 173, 175, 177, 179) (121) (171)
(163) (173), (173) (124)
(173) (165) (175)
(179)
(121) (177)
(140) (91)가 (171)
(1711) (92) (91)

(171, 173, 175, 179), (177) (1711) 2 (711
, 731, 751, 791, 7111) 2 (712, 732, 752, 792, 7112) (17
1, 173, 175, 179) 2 (711, 731, 751, 791) 2 (712, 732, 752, 79
2) (151, 153, 159) .

(91) (171, 173, 175, 179) 가 (911, 912)
(92) () .

(171) (Coupling Capacitance) 1
, 1

1 (1711) (91) 가 가 (1711)
(1711) (91) 가 가 .

1 (171) (1711) 1
가 .

(99) Cr (1711) (Repair
(131) 가 가 .

bar) .

(1711) (131) 가 (131) (131)
(1711) (140) (131) (131) 가 (1711) (131) (1711)
(131) 가 (131) .

(175) 1 (181), (129) 2
(179) 3 (183), (177) 4
(184) 가 (180) . (135) 5 (185
) (180) .

(180) 1 4 (181, 184) (175) (17
7) (190), 2 (182) (129) (179)
(95) 3 (183) (179) (97)가
(190) (121) (171) 가 (190) (190)
() (180) 가 (171) (190)
) 가 .

(180) 5 (185) (135) (91)
(99)가 .

1c ,

(210) (220), (230) (270)

(3)

(220)가 (220)가
, 가 가 , 1
1 가 .
2 2a 2d ,
가 .

2a 2b 2d 2a IIb-I
 lb' , IIc-IIc' , IId-IId'

2a 2d (110) 1 (211, 241, 251, 311)
 1 (212, 242, 252, 312) (121, 124, 125) (1
 31) (211, 241, 251, 311) 1 (212, 242, 252, 312)
 (110)

(121, 124, 125) 가 (124)

(125)

(131) (190) (177)

(190) (121) (135) (91)가

131) (131)

(110) (190) 가 (91)

가 (135)

(91) (171) (99)

(91) (135) ITO

(121, 124, 125) (131) Al, Al , Ag, Ag , Cr, Ti, Ta, Mo
 1 (211, 241, 251) Cr, Mo, Ti, Ta
 , 1 (212, 242, 252) Al Ag

(121) (131)

2 1 (211, 241, 251) Cr 1 (212,
 242, 252) Al ITO (99)가 (99)

, Cr Al Cr (91) ITO

(121, 124, 125) (131) (140) (140)

(151, 153, 157, 159) (161, 162, 163, 165, 169)

(161, 163, 162, 169) (171, 173, 175, 179) (177)

(1711) (1711) 1 (121) 1

(1900) (1900)

(1900) (121), (1711)

(1900) (121), (1711)

3 가 (171, 173, 175, 179) (173), (175) (177) (131) (1

79)

(171, 173, 175, 179) (177) (161, 163, 162, 169)

(151, 153, 157, 159) (151)

(151) (173) (175) (173, 175)

(163, 165) (151)

(140) (91)가 (171)

(1711) (92) (91)

(159) (91) (140) (91)

(169)

(171) (Coupling Capacitance) 1

1

(1711) (91) 가 가 (1711)

1 (171) (1711) 1

가

(99) Cr (1711) (Repair b

(131) 가 가

ar)

(1711) (131) 가 (131) (131)

(1711) (140) (131) (131) 가 (1711) (131)

(131) 가 (131)

(171, 173, 175, 179) (177) 1 4 (181 184)

(180) 1 (181) (175) 2 (182)

(129) 3 (183) (179) 4 (184)

(177) (135) 5 (185) (180)

(180) 1 (181) 4 (184) (175)

(177) (95) 3 (190), 2 (182) (125)

(190) (183) (179) (97)가

(180) (171) (171) (190)

가 (180) 5 (185) (135) (91)

) (99)가

2d

(210) (220), (230) (270)

(3)

(220)가 (220)가

가 가 가

1

가 가

(1)

(57)

1.

가

3 가

3 가

2.

1

3.

2

4.

가

1

1

3 가

3 가

2

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가

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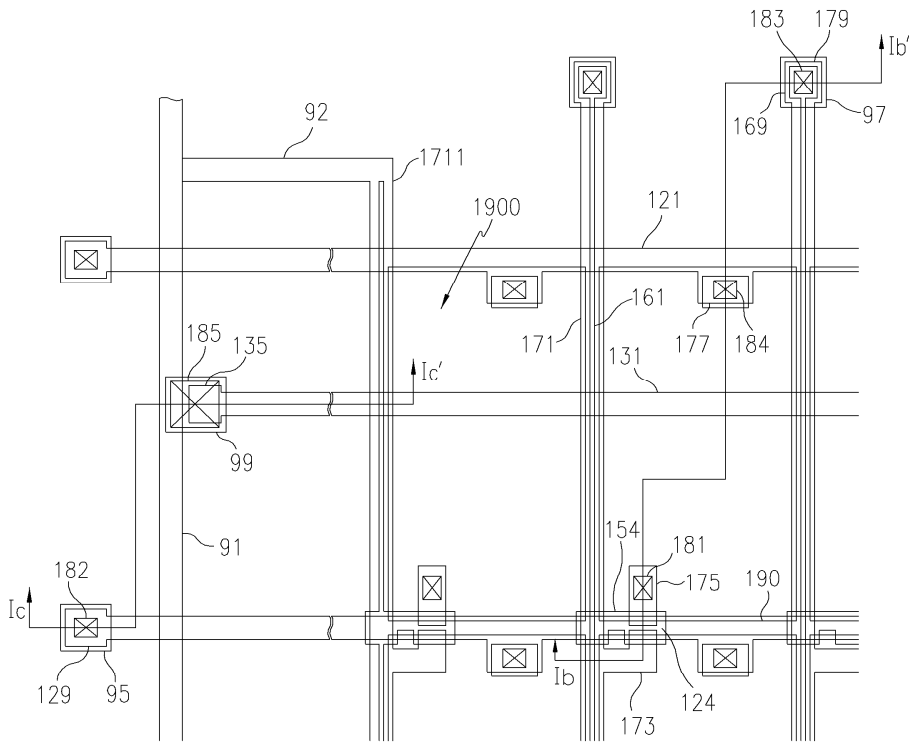
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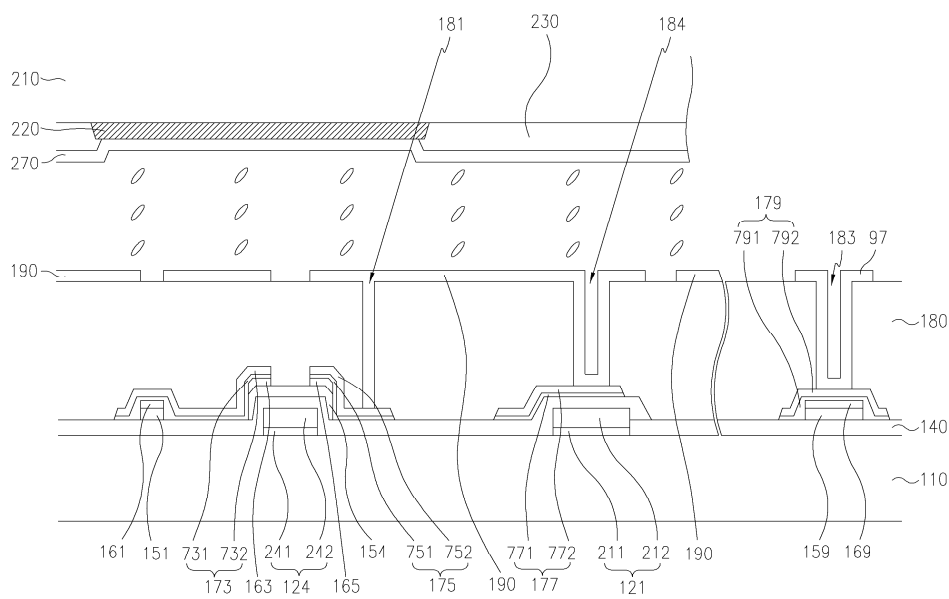
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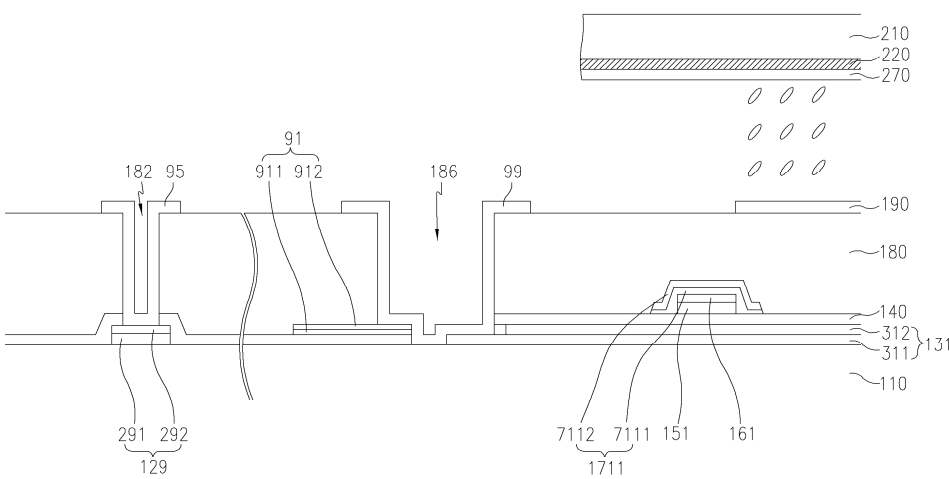
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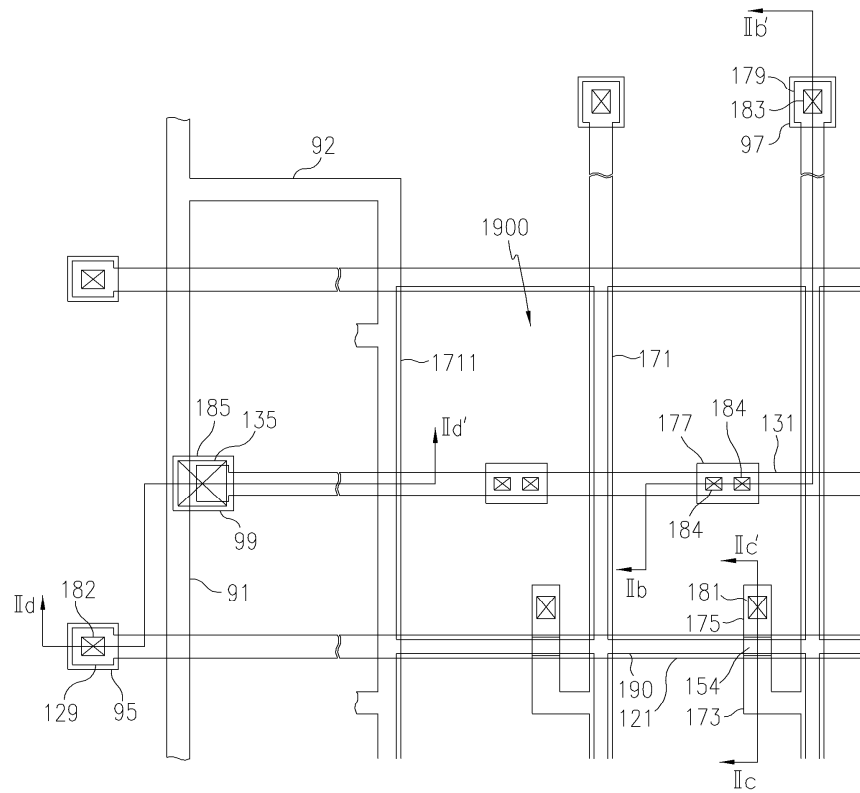
1b



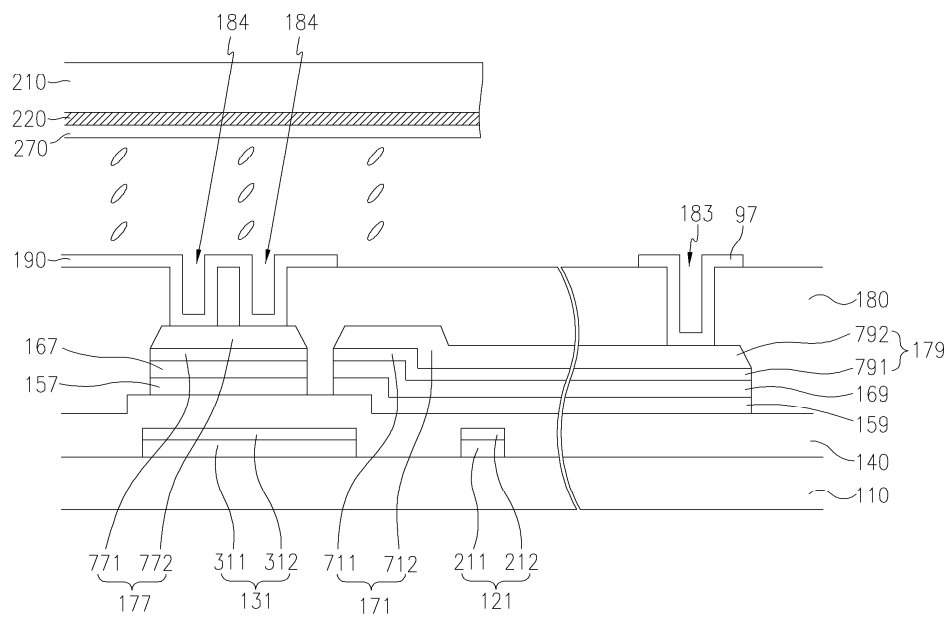
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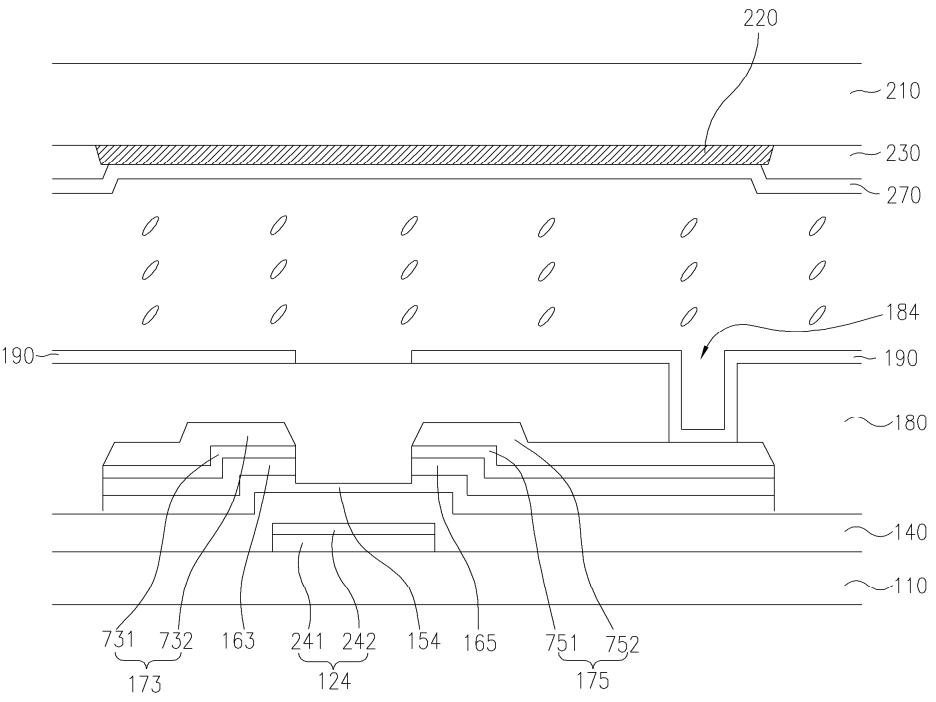
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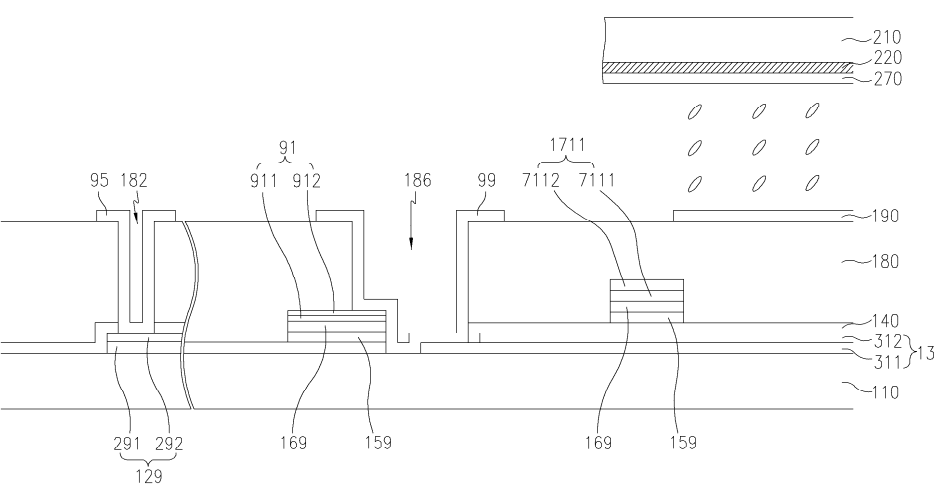
2b



2c



2d



专利名称(译)	薄膜晶体管显示面板和包括其的液晶显示装置		
公开(公告)号	KR1020040098466A	公开(公告)日	2004-11-20
申请号	KR1020030030843	申请日	2003-05-15
[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 JEONGIL 김정일 LEE SEONGYOUNG 이성영 LEE BACKWON 이백원 CHANG JONGWOONG 장종웅		
发明人	김정일 이성영 이백원 장종웅		
IPC分类号	G02F1/136		
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其他公开文献	KR100940574B1		
外部链接	Espacenet		

摘要(译)

目的：提供TFT（薄膜晶体管）基板和使用其的LCD（液晶显示器），以通过形成相邻的虚拟数据线来减小由于第一数据线和其数据之间的耦合电容引起的亮度差。第一数据线。构成：基板具有显示区域和围绕该显示区域的外围区域。在显示区域中形成多个像素单元。像素单元包括多条栅极线（121），多条数据线（171），多条像素晶体管（124,154,173,175），多条数据线（171）包括与外围区域相邻的第一数据线。在外围区域中形成与第一数据线相邻的虚拟像素单元（1900）。虚拟像素单元（1900）包括与第一数据线相邻的虚拟数据线（1711），栅极线（121），虚拟像素电极和虚拟薄膜晶体管。

