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(73) 가 가 5 7 1

(72) 5 7 1 가 가

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(74)

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(54) 2

10) (13) , (7), (10) , ()
(7) (23) (30) (7) (23), ()
10) (11) (8) (32) , (250) 가 ()
(11) (V_{GOFF}) (250)

29) (129) 가 (130) , (129) ,

(129) 가 (129) .

, (122) 가 (121) , (111)
 , (104) - (107) (123) 가 (110)
 가 가 .

8 - 234212 2 ,
 (169), (170) 2
 (169) (169) (169) 가 (108/12
 8) (169) 2 (169) (151) (170)

46) 1 (141), (142),
 (150), (147), (148) , (150)
 , (143), (144), (145), (1
 (142) (141) , (143)
 (144) (143) / (144)
 (145) , (142) (151)
 47) (143) (146) (150) (1
 (146) (147) (150) (147)
 (148)

(161) (161), (163), (168) (163)
 , (168) . (169) 148 168
 (170)

(129) (169) ,
 (169) (151)
 (147) (147) (163)
 (147) (163) (169)
 (163) (170) (147)
 , (169)
 , (150)

(169) 가 (148) (169) (144) (169) (169)
 (144) (169) (151) (150)
 3 , 2 3 , “ V_{SP} ” , “ V_G ” , “ V_D ” ,
 “ V_{COM} ” , “ CLS ” (169) (142) (145)
 (V_G) (163) (170) (152)
 (151) (169) (V_{SP}) (142) (V_G)
 (V_{SP}) (151)

(169) 가 (169) (169) 가
 (169) (163) (169)

4 (V_{G OFF}) (169) 가
 (147) (151) (I_{DS}) 가
 (170) 가 (169)
 가 가

1 가 2 1 가 1 1 1
 2 1 2 1 1
 1 2
 가

()

1

2 (151) , (169) (150)
 2
 4 , "V_{G OFF}"
 5
 (V_{G OFF}) " "
 6, 7, 8 가 , 1 (100), 2
 (200), 1 (100) 2 (200) (250), 1
 (100) 2 (200) (30) (100, 200, 250,
 30) (10), (7),
 (23), (7) (7) (23) (30)
 (23)
 " " (10)
 , 1 2 (100/200)
 100 (2) (13) (2) (13) 1 ()
 (1) (2) (2) (13)
 (10) (13) (7) (2)
 (13)
 (2) (13) (7)
 (2) (7)
 (14) (7) (22) (14; 6)
 1 (100) (1), (2), (10), (13), (7),
 (8) (1) (2) (2) (1)
 (3) (2) (1) (3) (1)
 (3) (10) (10) 가
 (4) (3) (2) (4)
 (4) (13) (3) (4)
 (11) (12) (4)
 (5) (13) (6)
 (3) (7)
 (3), (4), (5), (6) , (2)
 (10) (7) (8) (10) (13)
 (8)

(10) (8) (8)

(11) . ,

2 (200) (21), (22), (31), (32), ((

29), (33), (23) 가 (21) . (22) (22)

(14) (22) 가 (14) (14)

(7) (7) (14)

(14) (31) , ,

(10), (2), (13) (22) (7)

(31) . (7) (30) , (7)

31) , .

(22) (31) (32) 가 .

(29) 가 , (29) .

가 (29) (32)

(33) . (23) (8) (33) (34)

(34) (23) , (23) (23) (33)

(23) (29) (33) (25

0) (8) (250) (8) , (10) (1

1) (11) (33) (10)

(34) (V_{G OFF}) 가 (33) (23)

(34) , 1

(100) .

7 가 , (23) (7) (V_{COM}) (23)

가 , 가 (7) (23) 가 .

2 (200) 1 (100) , (30) .

가 (33) (8) (34) (33) 가

(12) (13) (7) (11) (4)

(7) , (2) (10) 가 (12) (2)

(10) , (7) (13) (7)

(7) (23)

(33) (V_{GOFF})

(10) 가

(cyano) (250) 가 (1

1) 가

1 (100) 2 (200) (250)

11) (8) 가 (5/6) (250)

1 (100) 2 (200) (10) (11)

2

9, 10, 11 가 1 (150), 2 (230), (30), (260) (260) 2 (230)

2 (230) (230) 1 (105) 1 (105)

2 (230) (260) 2 (230)

(43) (V_{COM})

1 (150) 1 (100) 1 (150)

1 (100) (41) (42) (260) (41) (1

0) (8) (41) (41) (260) (41) (260)

가 (8) 9 (V_{COM}) (260)

(8) (10) (41)

(260) (8) (8)

(260) (8) 가 1 (150) 2

(230) (260)

2 (230) 2 (200) 2 (200) (200)

9) (10) (260) (V_{COM}) 가 (2

(33) (33) 11 (43)

(43) (33) (V_{COM}) (V_{COM})

(43) (33) (33) (33) (43)

(260) (41) (10)
 , 가 ,
 (V_{COM}) (V_{GON} ; 4) (V_{GOFF}) 가 ,
 (V_{COM}) (41) (7)
 (13) 가 (30) ()
 30) 가 가 (30)

(43) (23) (23) (33)
 , 가 , (43) 1 (230)
 (43) (43)

8 - 262484 (260) (V_{COM}) 가
 (260)
 3

12 13 가 , 1 (300), 2
 (400), (79), (80) 1 (300) 2 (400)
 (79) 2 1 (300) 2
 (400) (80)

3
 가 63 - 21907 가 , 2
 , 1

1 (300) (51), (52), (73), (60),
 (57), (63), (58) (63) (52)
 (52) (51) (73) (52)
 (73) , 12

(53), (54), (60) (52) (60)
 (60) (55), (56) (53)
 (53) (54) (53)
 (91) (92) (54)
 (63) (53) (52)
 (55) (63) (54)
 56) (57) (53) (56) (54)
 (57) (73) 2
 (60) (57) (58) (54)
 (58) (58) 가 (60)
 (54) (58)

(79) , 1 2 (300/400) .

2 (400) (71), (81) (7

2) (71) (72) (72) (81) (79) (81)

(72) , (72) (81) (72) (79) ,

(81) (72) (79)

(60) (79) (58) ,

(V_{COM}) (V_G V_{COM}) (V_{G OFF}) (57)

(79) 가 (91) (91)

(91) 가 (91) (79)

(V_{G OFF} V_{COM}) (11/41/91) 가 (57) (

(10/60) (7/57) (23/43/73)

(29) (79) 3 , , , 2가 2

가 (250/260) 1 (100)

(250/260) (29)

(57)

1.

1 (1; 51),

1 (1; 51) 1 (11; 41; 91) 1 (11; 41; 91)

1 (1; 51) 가 2 (12; 42; 92) 가 (1

0; 60),

1 (1; 51) , ,

(13; 63) (7; 57),

150; 300) ; (10; 60) (8; 58) 1 (100;

; 1 (100; 150; 300) 2 (200; 230; 400)

60; 79); (8; 58) 2 (200; 230; 400) (250; 2

(8; 58) 2 (200; 230; 400) ,
 (30; 80) ,
 1 (250; 260; 79) , 1 (11; 41; 91)
 1 (V_G; V_{GOFF} ; V_{COM})

2.

1 ,
 (V_G; V_{GOFF}) , 1 2 (7;37) 가
 (V_{COM}) .

3.

1 ,
 (V_{GOFF}) , 1 .

4.

1 ,
 (V_{COM}) , 1 2 (7;57) 가 .

5.

1 ,
 (10;60)

6.

5 ,
 (10; 60) ,

1 (1; 51) (2; 52) ,

(2; 52) , 1 (1; 51) (3; 53),

(3; 53) 1 (11; 41; 91) 2 (12; 42; 92)

; 91) , 2 (12; 42; 92) 1 (11; 41

(250; 260; 79) (4; 54),

54) (3; 53) (13; 63) (4;

(5; 55),

(7; 57) (3; 53) (7; 57)

(7; 57) (6; 56)

7.

6 ,

(4;54), (5;55), (6;56) (8;58)

, (250; 260; 79)

8.

6 ,

(V_{G OFF}) (250; 79) 가 1 (11; 91)

9.

6 ,

(7; 57) 가 (260; 79) 1 2

(V_{COM})

10.

6 ,

2 (200)

2 (21),

2 (21) (7) (14)

(22),

(22) 2 (21) (32) ,

(23) (250) (32)

11.

10 ,

2 (200) , (14) 2 (21)

(31)

12.

10 ,

(23) ($V_{G\text{OFF}}$) (V_{COM}) ,

(7)

13.

6 ,

2 (230) ,

2 (21),

2 (21) (7)

(22)

(22) 2 (21) (32) ,

(43) (260) (32)

14.

13 ,

2 (230) 2 (21)

(31)

15.

13 ,

(43) (260)

(V_{COM})

16.

6 ,

1 (300) , 1 ,
 (57) 1 (51) (73)

17.

16 ,

2 (400) , 2 (71) , 2 (71)
 (57) (72) (79) (

18.

17 ,

2 (400) 2 (71) (81)

19.

1 ,

(33) (250; 260) (29) (29)

20.

19 ,

(29)

21.

19 ,

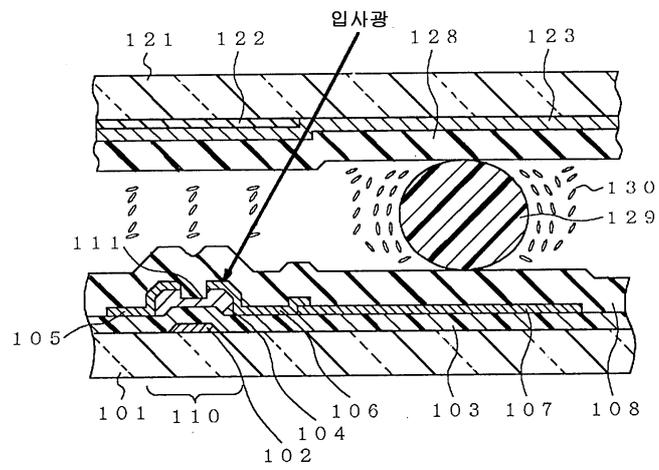
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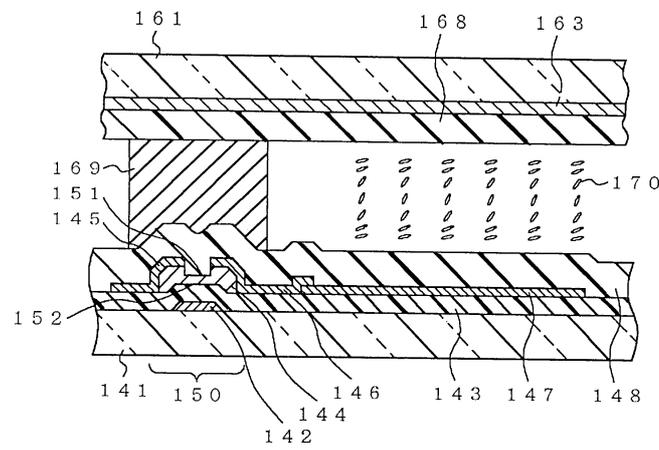
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(79) , , , 2

1
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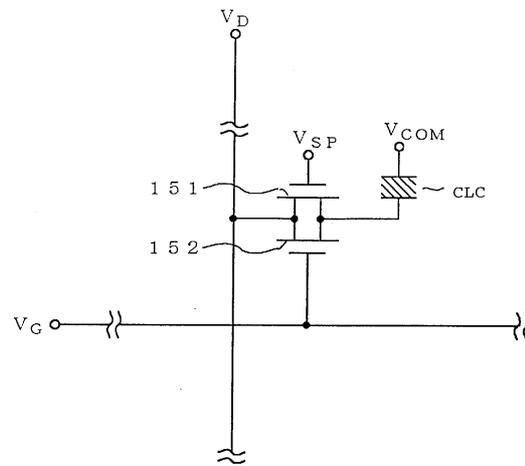


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종래 기술



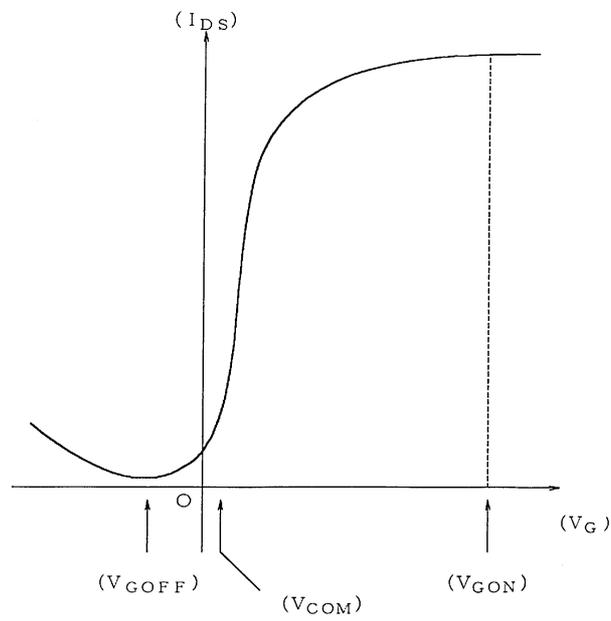
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종래 기술

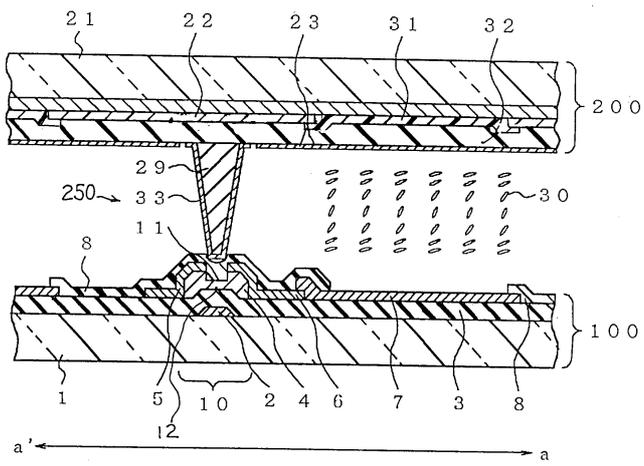


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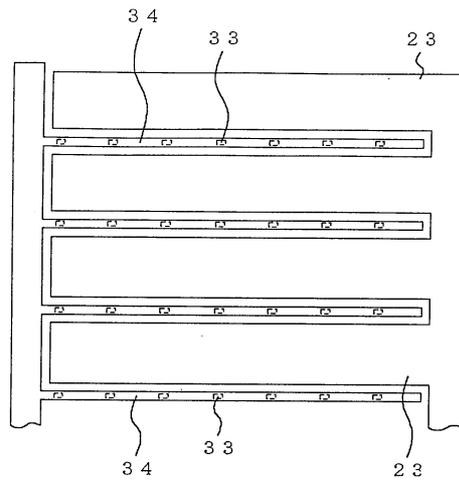
종래 기술



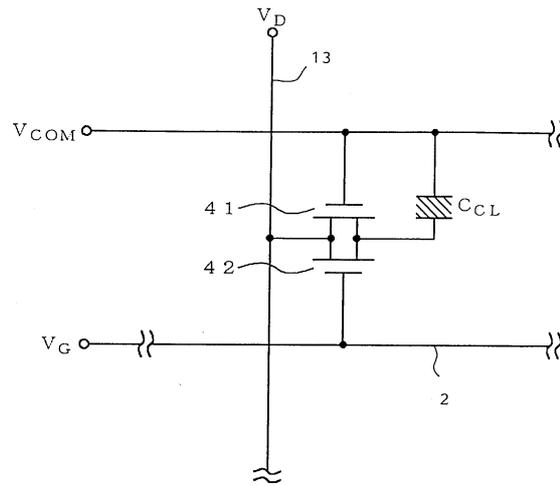
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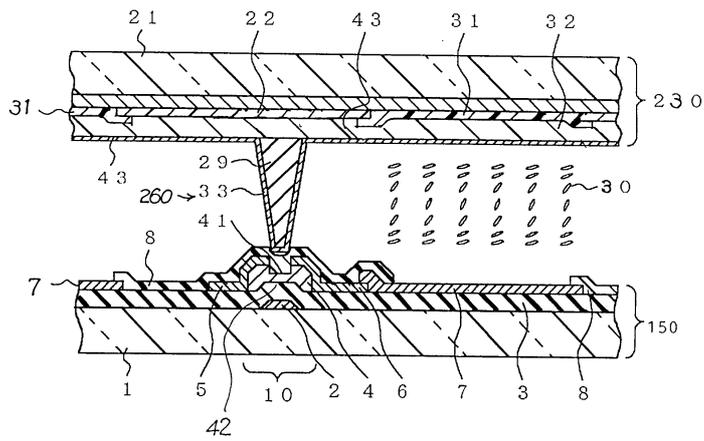
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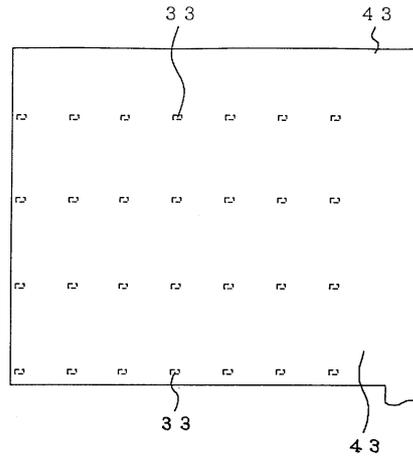
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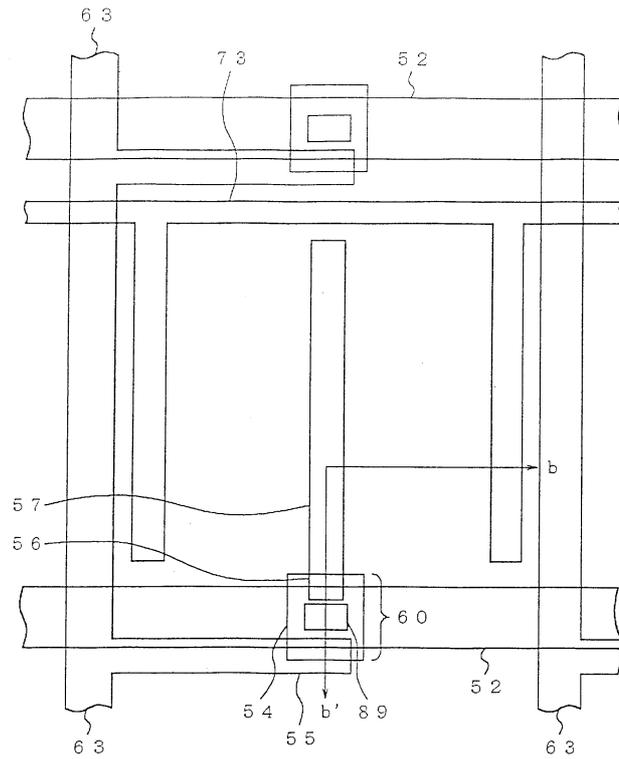
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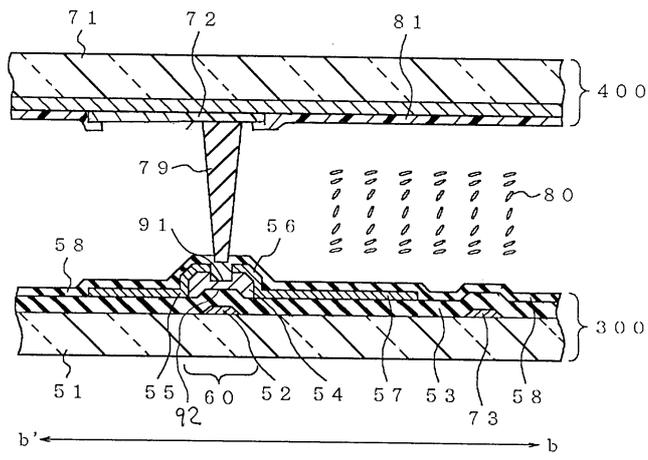
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12



13



专利名称(译)	在两个衬底结构之间提供导电间隔物，用于偏置薄膜晶体管的背沟道		
公开(公告)号	KR100378412B1	公开(公告)日	2003-03-29
申请号	KR1020000040605	申请日	2000-07-14
申请(专利权)人(译)	日本电气有限公司sikki		
当前申请(专利权)人(译)	日本电气有限公司sikki		
[标]发明人	WATANABE MAKOTO 와타나베마코토 KUROHA SHOICHI 구로하쇼이찌 HIDEHIRA MASANOBU 히데히라마사노부		
发明人	와타나베마코토 구로하쇼이찌 히데히라마사노부		
IPC分类号	G02F1/1335 G02F1/1339 G02F1/1368 H01L29/786 H01L21/336 G02F1/136		
CPC分类号	G02F1/1368 G02F1/13394 G02F1/133512 G02F2201/121		
代理人(译)	韩国专利公司 CHO, YOUNG WON		
优先权	1999200153 1999-07-14 JP		
其他公开文献	KR1020010029948A		
外部链接	Espacenet		

摘要(译)

有源矩阵型液晶显示器包括像素阵列，每个像素阵列由薄膜晶体管，通过薄膜晶体管连接到信号线的像素电极，与所述像素电极间隔开的公共电极和填充所述像素电极的液晶的组合实现。像素电极和公共电极之间的间隙，以及间隔物插入薄膜晶体管的后沟道区域上的保护绝缘层和平坦化层之间，其中间隔物是导电的并且以如下方式固定到某个电位水平。消除背沟道区域的导电性。

