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10-2002-0005459
2002 01 17

(30) JP-P-2000-00206758 2000 07 07 (JP)
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(73) 가 가 가 1 6 2

(72) 6-26-18

1-18-18

1-1-1-314

(74)

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(8) (8) (4)
(8) 200 400 (4)
(A) 0.2 1.2 μ m, (4) (8)
(B) 1 2 μ m (14)

1 1
 2 1 -
 3 OFF A
 4 OFF
 5 ON
 6 2
 7 6 -
 8 6 7
 9 8
 10 9
 11 10
 12 11
 13
 14 13 -

1, 51: 2:
 3: 4, 54:
 5, 55: 6, 56:
 7, 57: 8, 58:
 11, 61: 12, 62:
 13, 63: 14, 64:
 17, 67: 19, 69:

, 13
 , 14 13 -
 (101) (102) (103) (104) (105)
 (101) (105) 13 (104) (106)
 (105) (101) (106)
 (104) (107) (107) (108) (107)
 (108) (109, 110)
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 (111) (112) (113)
 (104), (106), (107), (108), (109, 110),
 (111) (113) (114)가 (116) (117) (118)
 (114) ITO (116) (117) (119) (120) 13
 116) 17) (116) (118) (113) (119) (120) 13
 (119) (104) (105) (111) (112)
 (102) (101) (116) (117) 1
 , (102) (120) 2 , 13 1

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(104) (108) (108) (104)

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(104) (105)

A (104) () (108) 13 ,

) B (104) () (108) ()

) 가 2 ~ 3 μm .

(107) 가 (104) A B (105) 2 3 μm 가 (101) (108) (111) (112) 가 (114) OFF 가 :

$$\langle \begin{matrix} 1 \\ 1 \end{matrix} \rangle$$

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(1) (1) (1) (5)

(4) (8) (8) A (μm)

(4) (8) B (μm)

(1) ()

(14) OFF A ()

500 , B 1 $2\mu\text{m}$, 3 가

(7) , 4 (14) OFF

(7) , 5 가 (14) ON

B 1 $2\mu\text{m}$, 3 OFF 10V A 0.2 1. $2\mu\text{m}$,

-5V . ON 10V +15V

3 5 , , , 0cd/m² , 1500cd/

m² , 3000cd/m² , 5400cd/m² , A B

3 (7) 가 500 OFF () A

가 , A 1 μm , 4 A 0.2 1. $2\mu\text{m}$, (7)

5 , 4 OFF (7) 가

ON 4 (7) 가 400 OFF 5

가 , (7) 400 가

(7) 가 200 ON (7) 200 400

(7) A 0.2 1. $2\mu\text{m}$, B 1 $2\mu\text{m}$ (7) 200 400

ON OFF () . 4

(7) 350 OFF ()

(7) 200 350 (8)

B 0.2 1. $2\mu\text{m}$, 0.5 1. $2\mu\text{m}$ A 0.5 1. $2\mu\text{m}$.

1 2 (14) (11) (12)

(13) (11) (12)

) L (11)

(12) (13) L (12)

가 , (11)

(13) 2 (11) (13) 가

< 2 > 1

6 R, G, B 3 (67) , (55)

(67) (67) (52) (

67) (62) (64) , (61)

(63) , (64) (54), (61)

(55) (54) (63) (58) 가

(61) (55) (67) (67) (

64) (58) (54) (58) (

() (54) (54) B A , (58)

() (54) (54) (71) (72) , (72)

(67) (67) (上邊部下) (71) (72) (62)

71) (67) (62) (55) , (72)

(64) (62) (62a) (62) (62)

(55) (64) (72) (58) (61)

(62) (62a) (55) 가 (55) 가

(62) (62a) "69" (54) (55) (5) 7

1) (51) (54) (55) (56) (57) (58) (58) (5) 9, 60) (59) (56) (61) (6) 2) (60) (63) (63) (67) (68) (58) (63) (66) (66) (54), (56), (57), (64)가 (51) (51) (72) (54) (55) (71) (5) 6), 8a) (55) (71) (51) (57a) (58a) (81) (54) (81) (54) (58) A B (81) (58) (58a) 9 (57) 가 2 00 400 (81) (58) A 1 0. 2 1. 2 μ m, B 1 2 μ m (58) A B (58) 가 B , 0. 5 μ m 1. 5 μ m (81) 10 (63a) (62) (82, 83) (63a) (82) (6) 1) (82) (61) (62) (63a) 11 (83) (63) (64) (54), (61) (63) (62) (61) (62) (63) (62) (82, 83) (61) (62) (63a) (63) 가 가 (61) (63) (82, 83), 12 (61) (63) (65) (59) (58) (57a) (63) (57) 7 (66) (66) (66) (67) (68) (63)

2

(A)

가

가

200 400 (200 35
0.2 1.2 μ m

0) ,
ON OFF

(57)

1.

(17, 67);

(6, 56), (7, 57), (11, 61), (13, 63) (4, 54),
(5, 54) (8, 58) (7, 57)
(7, 57) 가 200 400 (14, 64)
(17, 67) (13, 63) (17, 67) (4, 54)
(17, 67) (8, 58) (4, 54)
4, 54) (4, 54) (8, 58) (4, 54)
0.2 1.2 μ m

2.

1 (7, 57) 가 200 350

3.

1 (4, 54) (8, 58) 0.5 1.2 μ m

4.

1 (8, 58) (4, 54) (17, 67) (4, 54)
(8, 58) (4, 54) (8, 58) 1 2 μ m

5.

1 (8, 58) (4, 54) (17, 67) (4, 54)
(4, 54) (8, 58) (4, 54)
(8, 58) 0.5 1.5 μ m

6.

5 (4, 54) (8, 58) (8, 58) (4, 54)

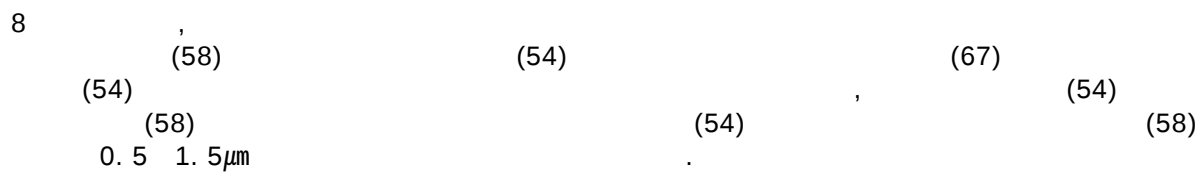
7.

1 (4, 54) (17, 67) (19, 69)

8.

1 (54) (55) (61) (55) (55)
(62) (63) (61)

9.



10.



11.



12.



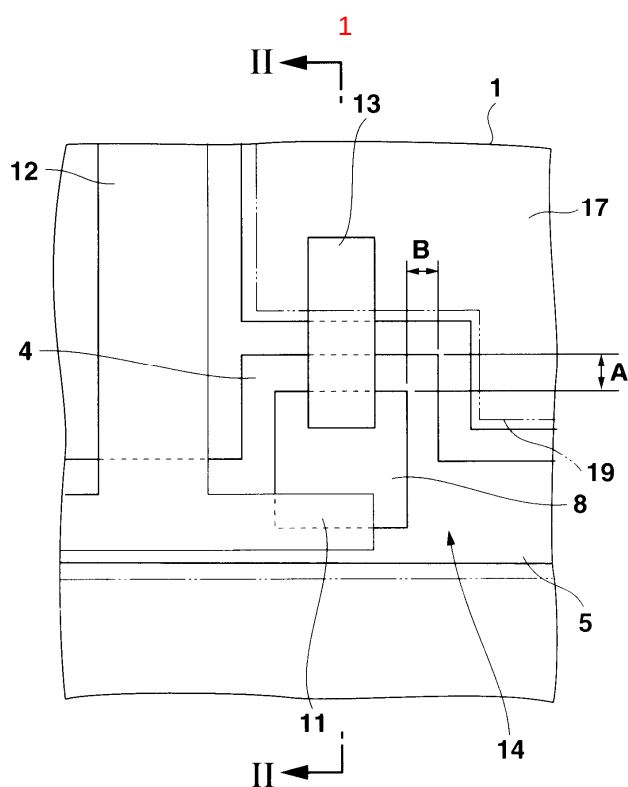
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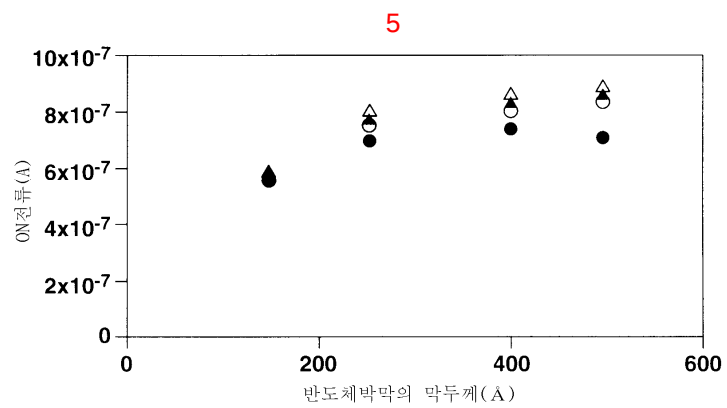
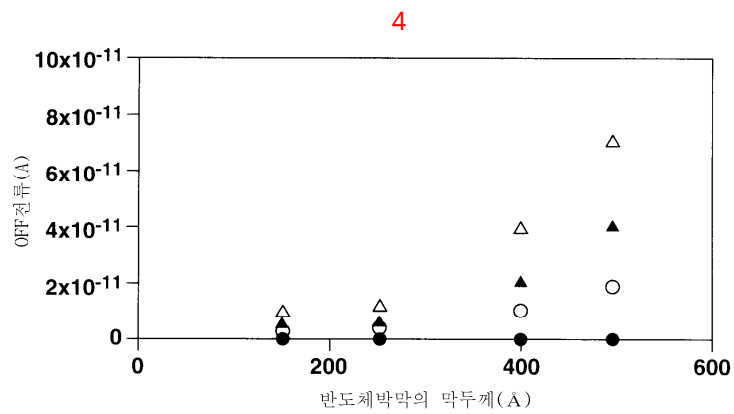
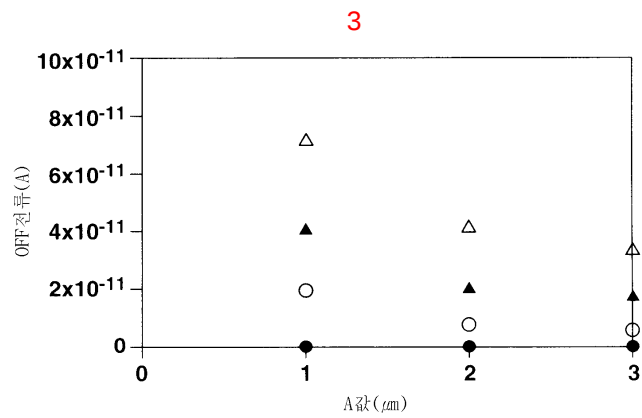
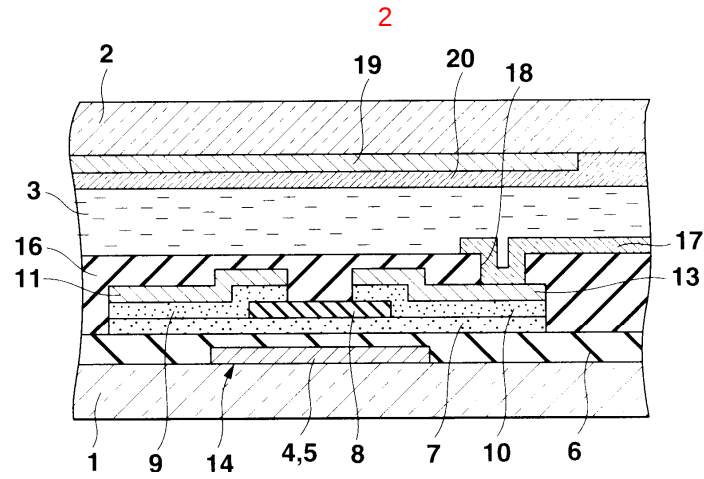
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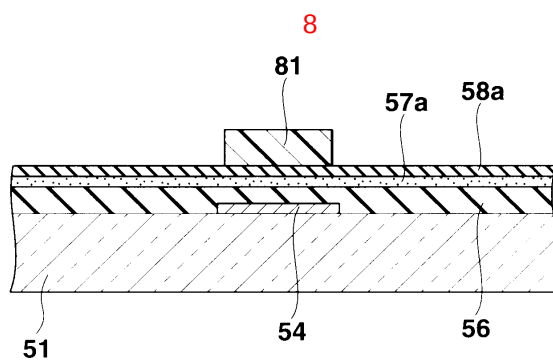
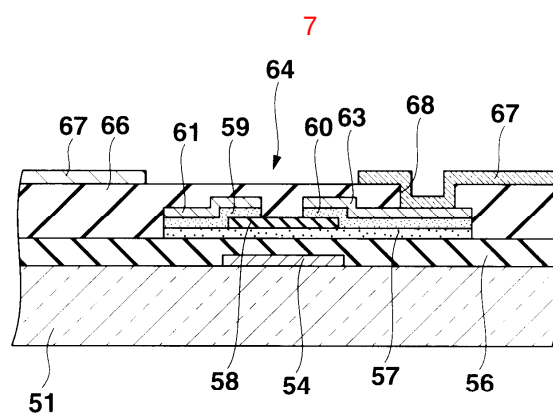
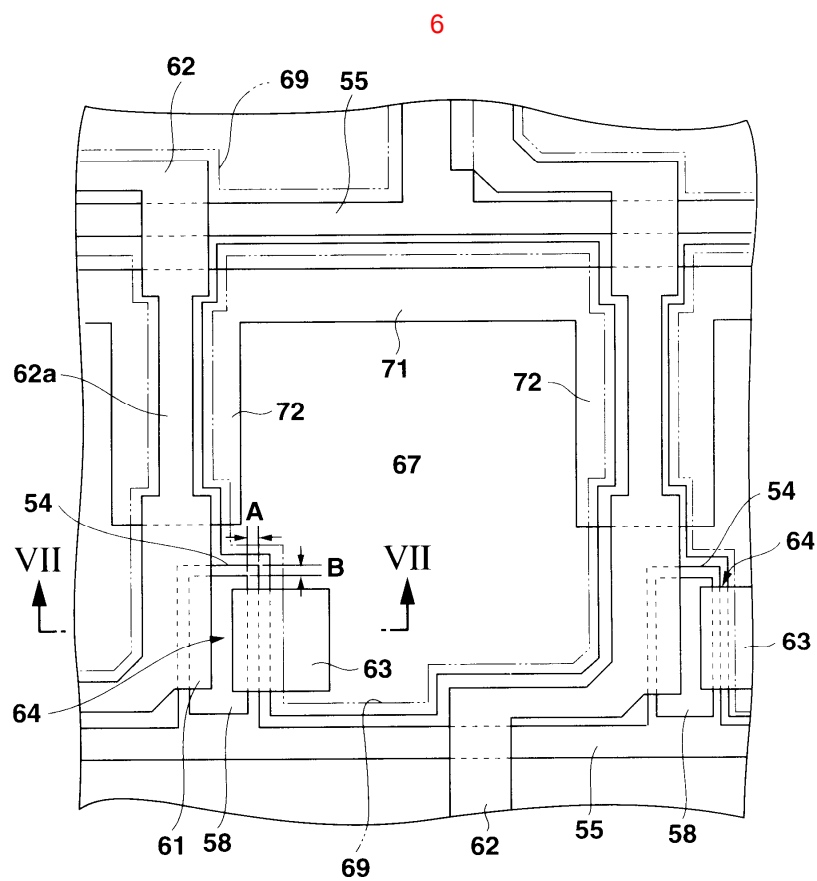
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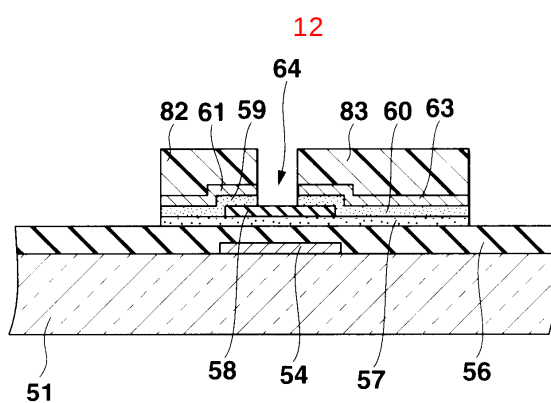
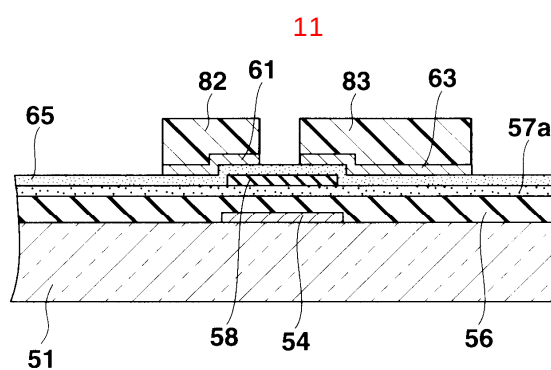
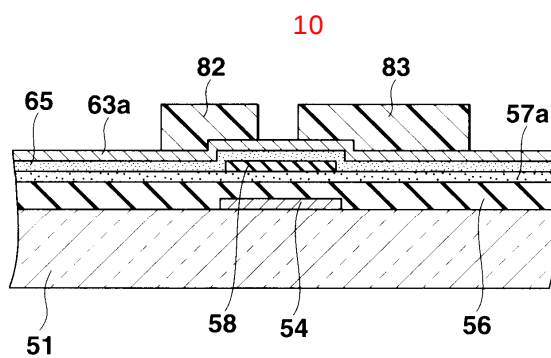
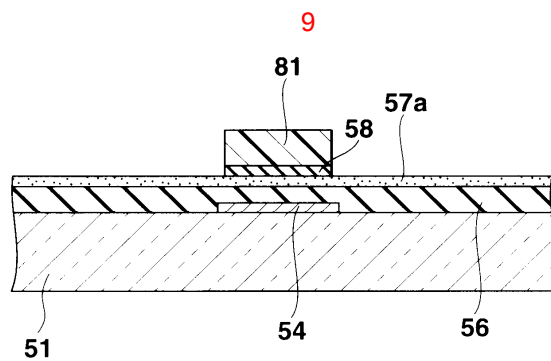
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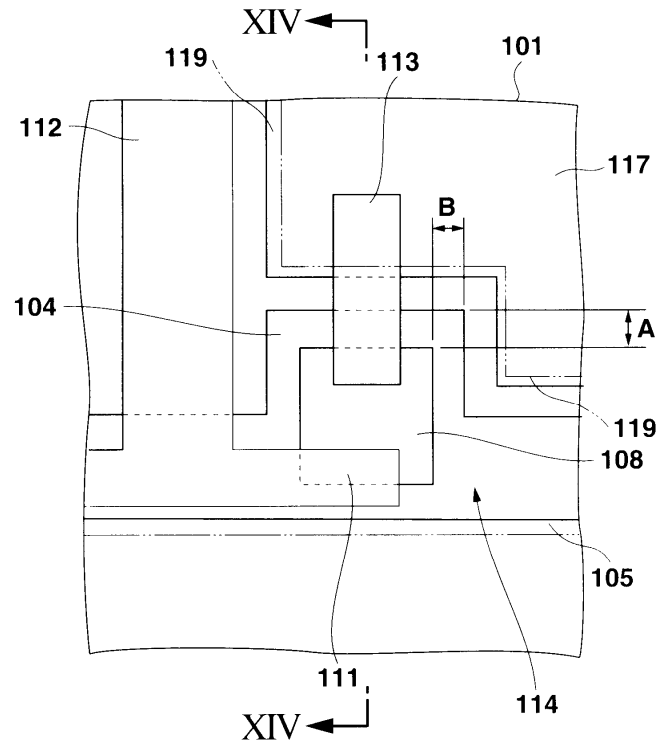






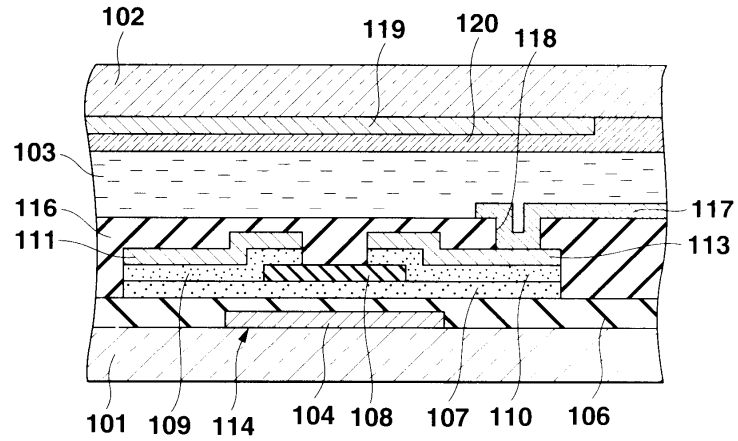
13

(종래의 기술)



14

(종래의 기술)



专利名称(译)	液晶显示元件		
公开(公告)号	KR100449587B1	公开(公告)日	2004-09-21
申请号	KR1020010040216	申请日	2001-07-06
[标]申请(专利权)人(译)	卡西欧计算机株式会社 西伯利亚有限公司计算关键财富		
申请(专利权)人(译)	计算关键是否西伯利亚有限公司		
当前申请(专利权)人(译)	计算关键是否西伯利亚有限公司		
[标]发明人	WATANABE HITOSHI 와타나베히토시 SHIMOMAKI SHINICHI 시모마키신이치 NAKAMURA YAYOI 나카무라야요이		
发明人	와타나베히토시 시모마키신이치 나카무라야요이		
IPC分类号	G02F1/1362 G02F1/136 G02F1/1368		
CPC分类号	G02F1/13624 G02F1/1368		
代理人(译)	孙某EUN JIN		
优先权	2000206758 2000-07-07 JP 2000289987 2000-09-25 JP		
其他公开文献	KR1020020005459A		
外部链接	Espacenet		

摘要(译)

根据本发明，形成的沟道保护膜的面积略小于由屏蔽金属膜形成的栅电极。形成半导体薄膜，使得厚度设定为不小于200埃且小于400埃。栅电极的沟道长度方向的边缘与沟道保护膜的边缘之间的距离A设定为约0.2-1.2 μm ，并且沟道宽度方向上的栅电极的边缘与边缘之间的距离B通道保护膜的厚度约为1-2毫安。利用这种结构，可以减少由于光照射引起的薄膜晶体管的漏电流。

