

(19)
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(51) 。 Int. Cl. ⁷ G02F 1/136		(11) (43)	10-2005-0000996 2005 01 06
(21)	10-2003-0041612		
(22)	2003 06 25		
(71)	.	20	
(72)	146-71	6 12 205	
(74)	:		
(54)			

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가

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2 1 ' - "

3a 3f 2

4 2

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6 5 ' - "

7	1	.
8	7	1
9	2	.
10	3	.
11	4	.
12	5	.
13	6	.

< >

2,102 : 4,104 :

6,106 : 8,108 :

10,110 : 12,112 :

14,114 : 16,116 :

18,118 : 20,120 :

22,122 :

/

, (Liquid Crystal Display; LCD)

(Thin film Transistor; TFT)가

(Amorphous)

(Poly)

가 . ,

가 가

가 .

가

가 . ,

가 .

1 2

(1) TFT(30), (2) (4), (2) , (4) (22)

(2) (30) (6)

(4) (30) (10) (22)

TFT(30) (2) (6) , (4) (8) , (22)
 (18) (20) (10)

(6) (16) (14C)
 (8) (6) (14S)
 (10) (6) (12)
 (14D) (26)
 FT(30)가 N n+ n- T TFT(30)가 n- , T
 , n-,n+ , n+ . TFT(30)가 P p+
 . p+ , p+

TFT(30) (2) (4)

(22) (18) (20) TFT(30) (10)

, TFT(30) 가 (22) () 가

3a 3f

, (1) SiO₂ 3a (16)
 (16) (1)
 (Al), / (Al/Nd) (6)

(6) (1) SiO₂ 3b
 (12) (12) (1)

(14) (1) 가
 가 (14C)
 (14S) (14D)

3c

, N TFT 1 n+ , 1
 n+,n- 2 n- , N TFT
 LDD , n+

P TFT 3 p+ , P TFT
 p+ , p+

(14C), (14S) (14D) (1)

3d (4), (8) (10) .

(4), (8) (10) (1) 3e

(18) (18) .

(18) (10) (20) .

(18) (1)

3f (22) .

(22) (20) (10)

TFT (6) (12)

(14)

(open) .

, 4 (6)

(6) (12) (14) (8) (10) .

, (6)

(6) (12) 가 (6) (6) (14S);

0) (6) (14D) (short) (6) (8); (6) (8) (10)

(Cgs,Cgd) TFT .

, /

가 ,

O₂ UV

가 .

가

O₂ UV

, 5 13

5 , 6 5

5 6 , (102) , (102) (112)
) TFT(130) , (102) (104) , (102) (104) (122)

(102) (130) (106)

(104) (130) (110) (122)

TFT(130) (102) (106) , (104) (108) ,
 (118) (120) (122) (110)

(106) (116) (112) (114)
 (106) (114C) (126) , (114S)
 (114D) (128)

(126) 1 2 (126)
 (108); (126) (110)
 , TFT

(128) (114S) (114D)
 , (106) (114) (114)

(108) (112) (106) (128)
 (114S) (110) (126) (106)
 (128) (114D) , (114) TFT(130)
) , TFT(130)가 N n+ n-
 가 n- , n-,n+
 n+ , TFT(130)가 P p+ p+
 , p+

TFT(130) (102) (104)

(122) (118) (120) TFT(130) (110)

, TFT(130) 가 (122) () 가

7 1

6) 7 , (101) PECVD, (116) (11 (126) (128) (SiOx) (SiNx) (106) (106) 8a 8e (116) (160) 8a (160) (158)가 (160) (150) (152) (S1) (152) (S2) (156)(S3) 8b (150) (154) (152) (S2) (S3) (162) (162) (S3) 1 (162) 2 (162) (160) 8c (Ashing) (S2) 2 (162) 가 (162) 8d 가 (106) 8d (106) O₂ UV 가 (106) (128) (106) (126) (126) (162) (162) (106) (126) 9 2 (9 (112) (106) (112) (101) SiO₂ (101) (114) (112) (106) 10 3 (114) (101) 가 (114S) (114D) (114C) , N TFT n+ , N TFT n+,n - , n- LDD , n+ P TFT p+ , p+ , P TFT 11 4

11 (114) (101) 4 (108) (

110) .

(101)

가 4

가

(110) (114S) (108) (110) (108)

(114D)

12 5

12 (120) (108) (110) (101) 5

(118)

(108) (110) (101) PECVD

(118) SiO₂, SiNx

(118)

가 5 가 (1

10) (120) (118)

13 6

13 (118) (101) 6

(122)

(118) (101)

가 (Indium Tin Oxide),

(Indium Zinc Oxide) (Indium Tin Zinc Oxide) 가

(122) (122) (1

22) (120) N TFT (110) (122)

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;

(Short)

(Open)

가

(57)

1.

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가
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2.
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3.
2 ,
O₂ UV

4.
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가 .

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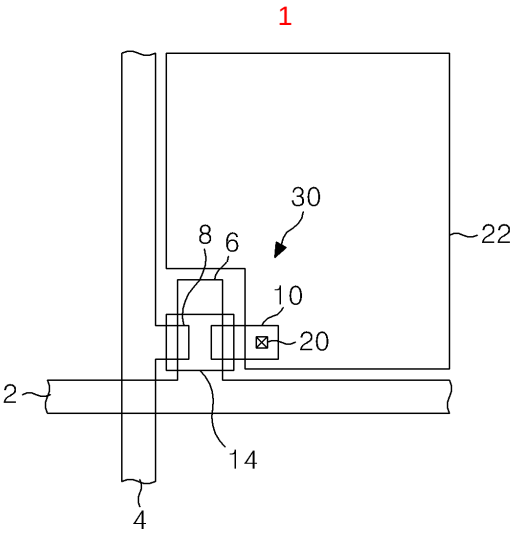
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7 8.

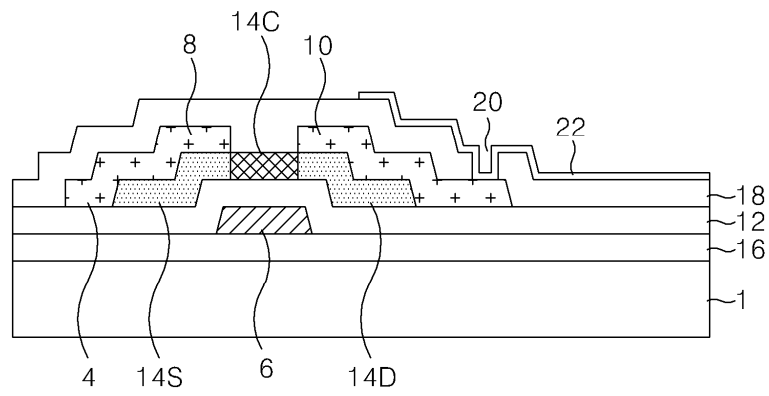
O₂ UV

6 9.

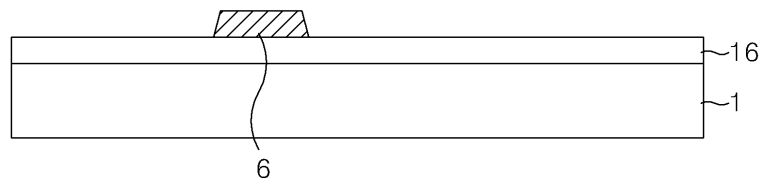
6 10.



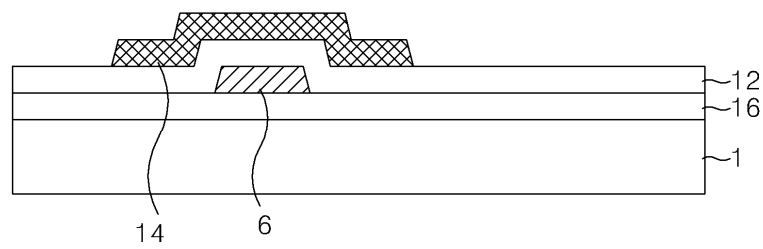
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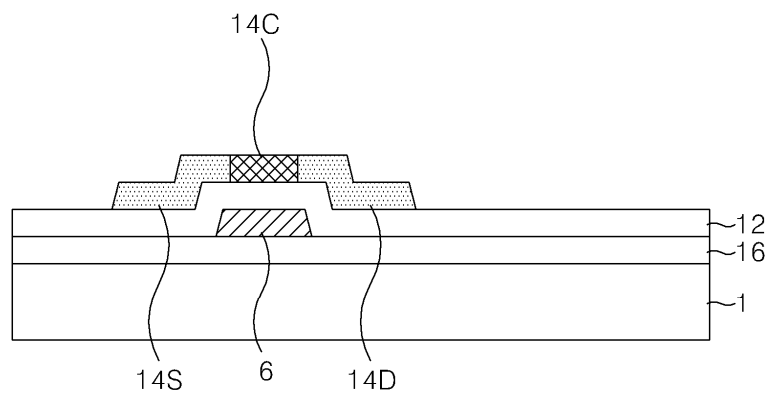
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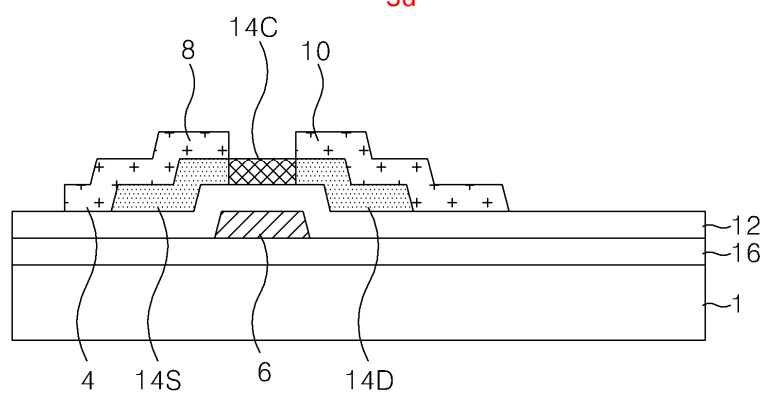
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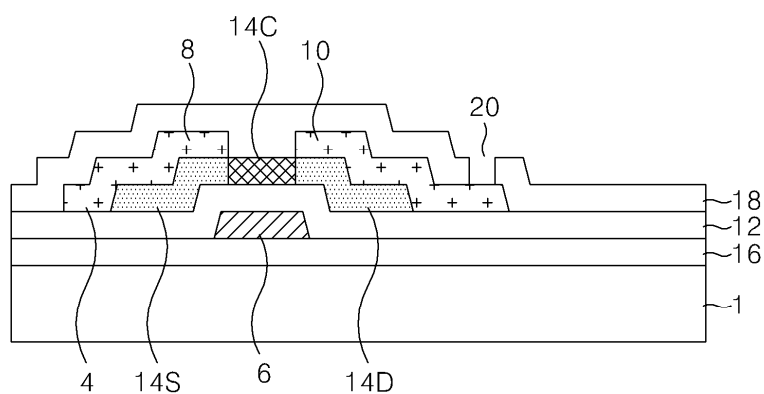
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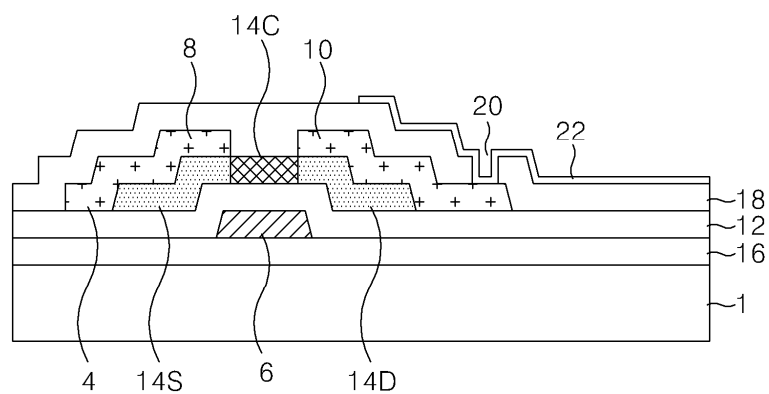
3d



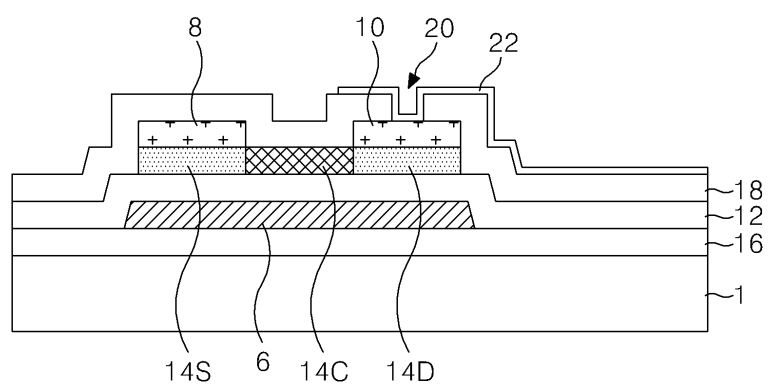
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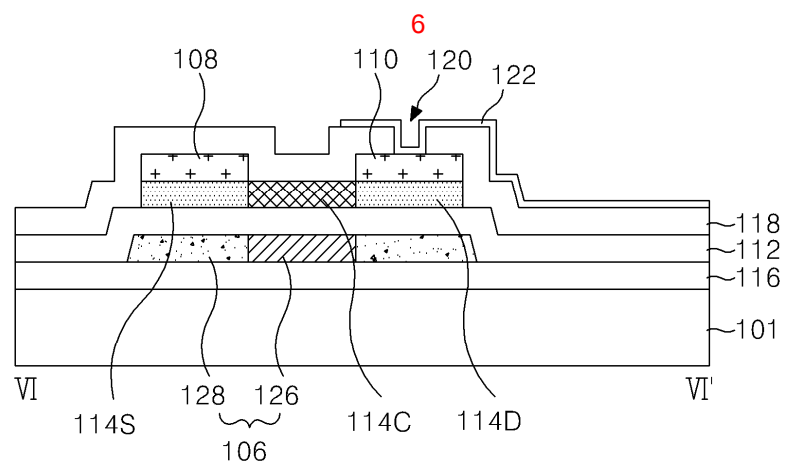
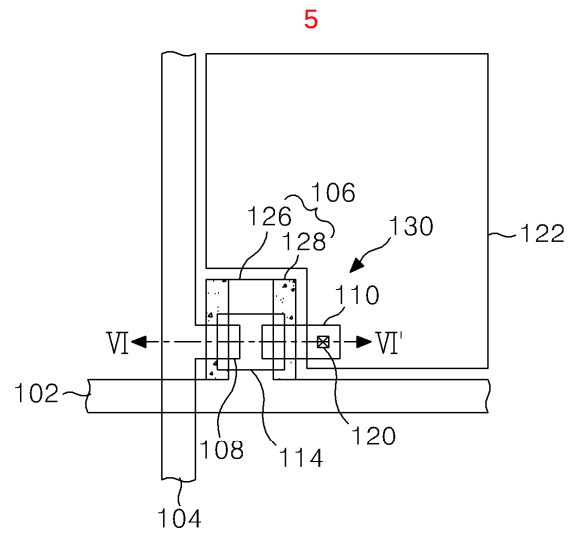


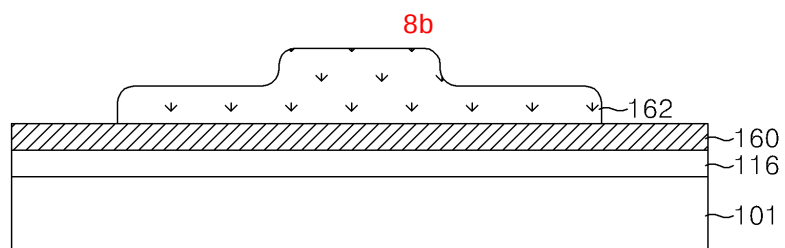
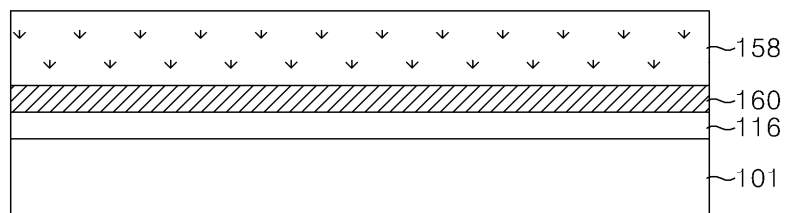
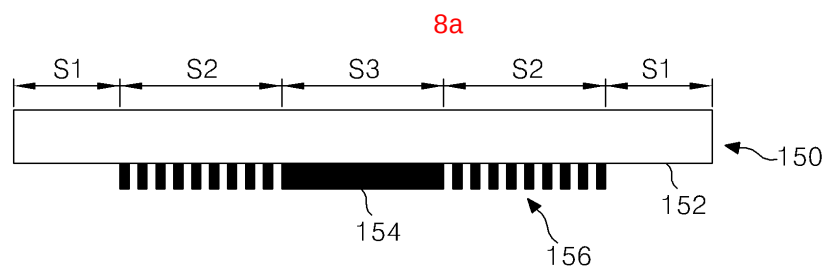
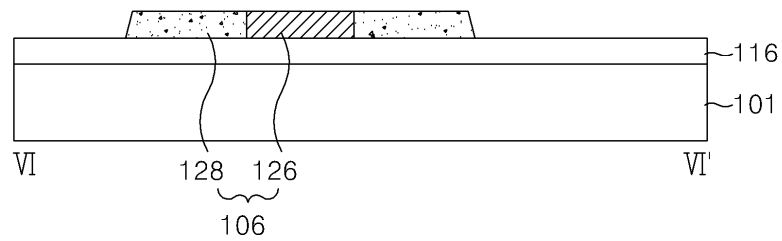
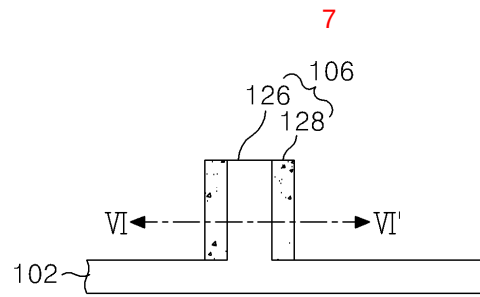
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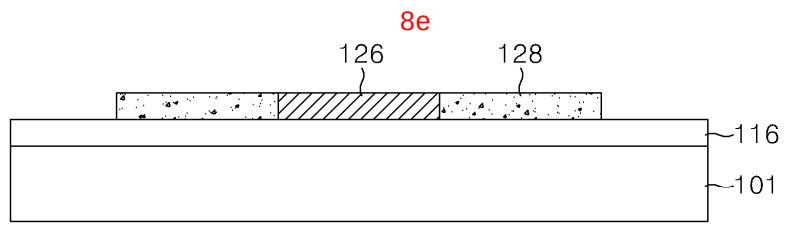
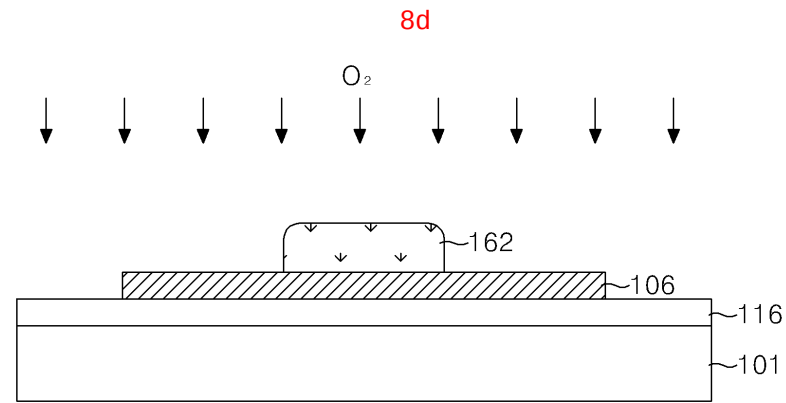
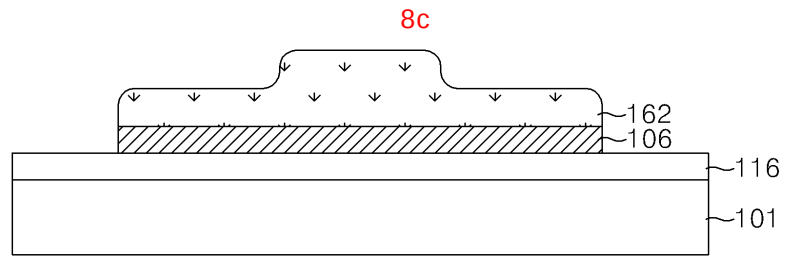


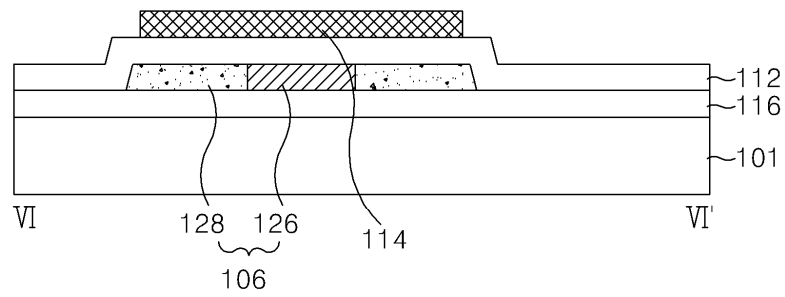
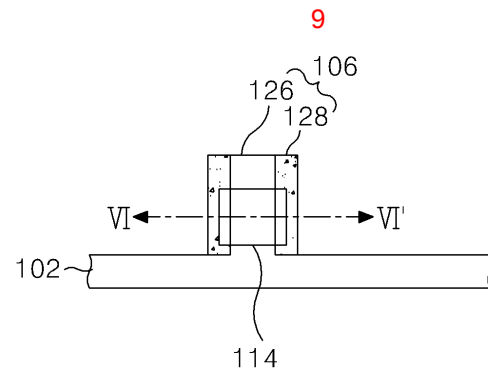
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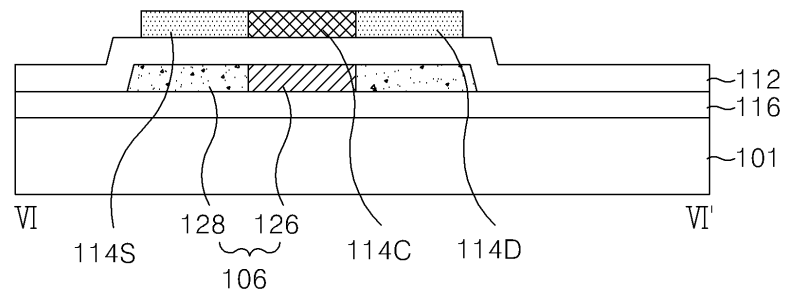
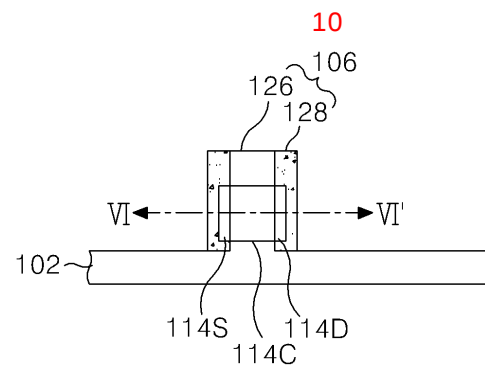




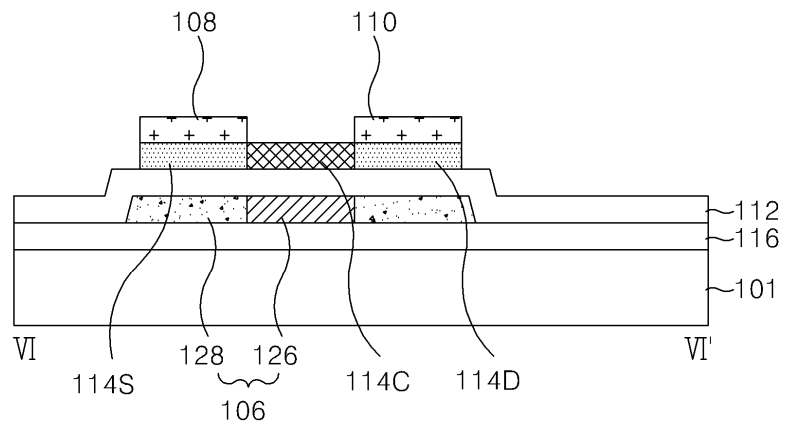
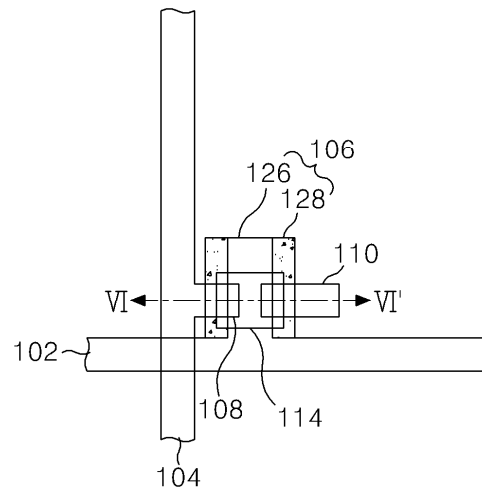




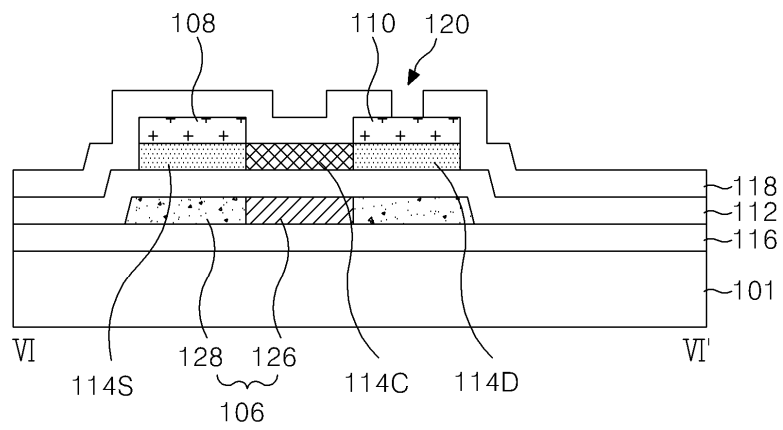
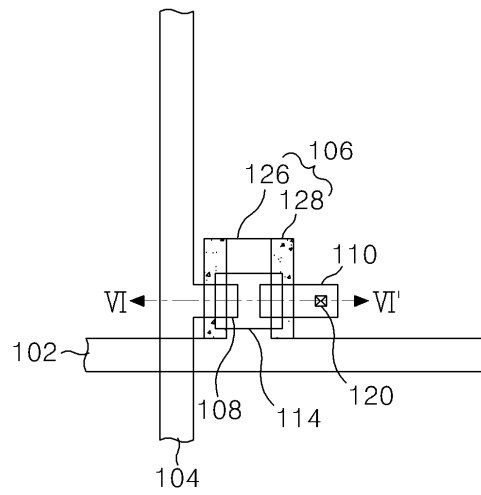




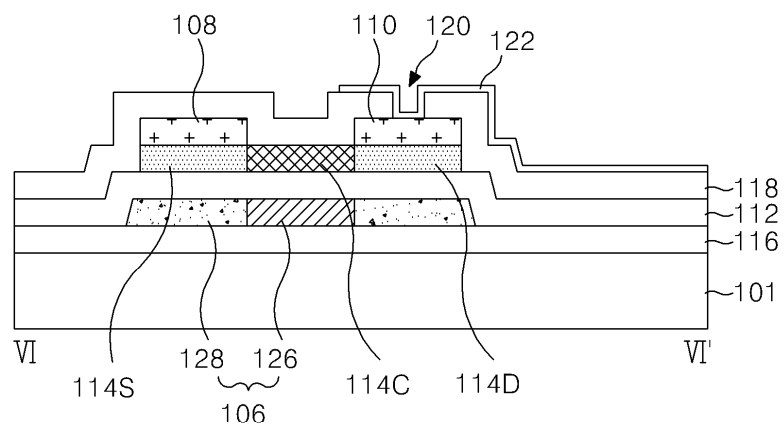
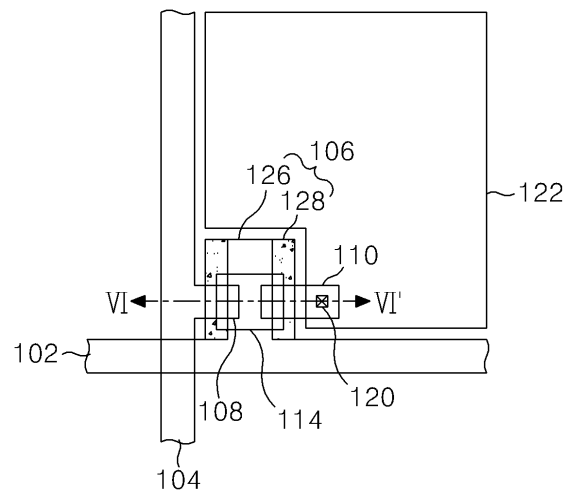
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专利名称(译)	液晶显示面板及其制造方法		
公开(公告)号	KR1020050000996A	公开(公告)日	2005-01-06
申请号	KR1020030041612	申请日	2003-06-25
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG显示器有限公司		
当前申请(专利权)人(译)	LG显示器有限公司		
[标]发明人	OH KUMMI		
发明人	OH,KUMMI		
IPC分类号	G02F1/136		
其他公开文献	KR100939918B1		
外部链接	Espacenet		

摘要(译)

本发明提供一种液晶显示面板及其制造方法，该液晶显示面板能够提高有源层的结晶效率并防止有源层的栅电极和源/漏电极之间的短路。本发明的液晶显示板包括部分氧化的栅电极和有源层，有源层的宽度小于栅电极并具有源区和漏区，它们被绝缘以插入栅电极的氧化区和栅绝缘膜之间，源电极与有源层的源区接触，漏电极与有源层的漏区接触。6

