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(43)

10-2004-0040241
2004 05 12

(21) 10-2002-0068593
(22) 2002 11 06

(71) . 20

(72) 138 1107

(74)
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(54)

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1
2 1 A-A'
3 1 TFT B-B'

4a 4d TFT

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6 1 A-A'

7 1 TFT B-B'

8a 8d

9

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601a, 601b --- 602a ---

602b --- 603a, 603b ---

604 --- 605 ---

606a, 606b --- 607 ---

608, 609 --- , 610 ---

611 ---

1 () 2 (1 ())

TFT(Thin Film Transistor: TFT)

가 , TFT

BM(Black Matrix: BM),

2 ()

가 TFT(Thin Film Transistor: TFT) (on) , 1 (on) TFT 가

1 (top gate) TFT (bottom gate)

TFT 가 1000

TFT TFT 가 450 (on) (off) 가

1

2 1 1 TFT B-B' A-A' 3
 (201a,201b) (203a,203b) ; (204) (203a,203b) (202) ; (201a,201b); (204)
 (205) ; (204) (205) (206a,206b) ;
 (206a) (207) ; (206b) (203b)
 (208,209) ; (210a,210b) ; (210b)
 (211)

2 3 TFT

4a 4d TFT 4a (202)
 (201a,201b)

4b (202) (203a,203b)

(205) (203a,203b) (204)

4c (204) (205) (204)
 (204) (205) (206a,206b)

(203b) (206b)

4d (208,209) (207)

(210b) (211) (208,209) (207) (210a,210b)

5 TFT (STEP COVERAGE)

6
 7 (601a,601b) TFT 1 B-B' A-A' (601a,601b) ; (602a) ;
 (602b) ; (603a,603b) ;
 (603a,603b) ; (604) (605) ; (604) (605) ; (606b)
 (606a,606b) ; (606a) (607) ; (608,609) ;
 (603b) (610a, 610b) ; (610b) (611)
 , 8a 8d 6 7
 , 8a (601a,601b) (601a)
 (602b)
 VD 400 가 (Si₂H₆) C
 400 ~ 450 LPCVD , 400 (602b) (602a)
 (602a) (608) (605)
 8b (602b) (602a) PECVD TFT
 (603a,603b) (603a,603b) (604) (605)
)
 8c (604) (606a,606b) , n TFT
 , p TFT , 450
 (605) 가
 (606a,606b) TEOS PECVD 6000
 (606a,606b)
 (step coverage) BPSG BSG ,
 가
 (603b) (606b)
 8d (608,609) (607)

, - (608,609) (610a,610b) (611) .
 , 9 , 10
 ,
 (CROSS OVER) 2 (STEP COVERAGE) 가

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 , 가

(57)

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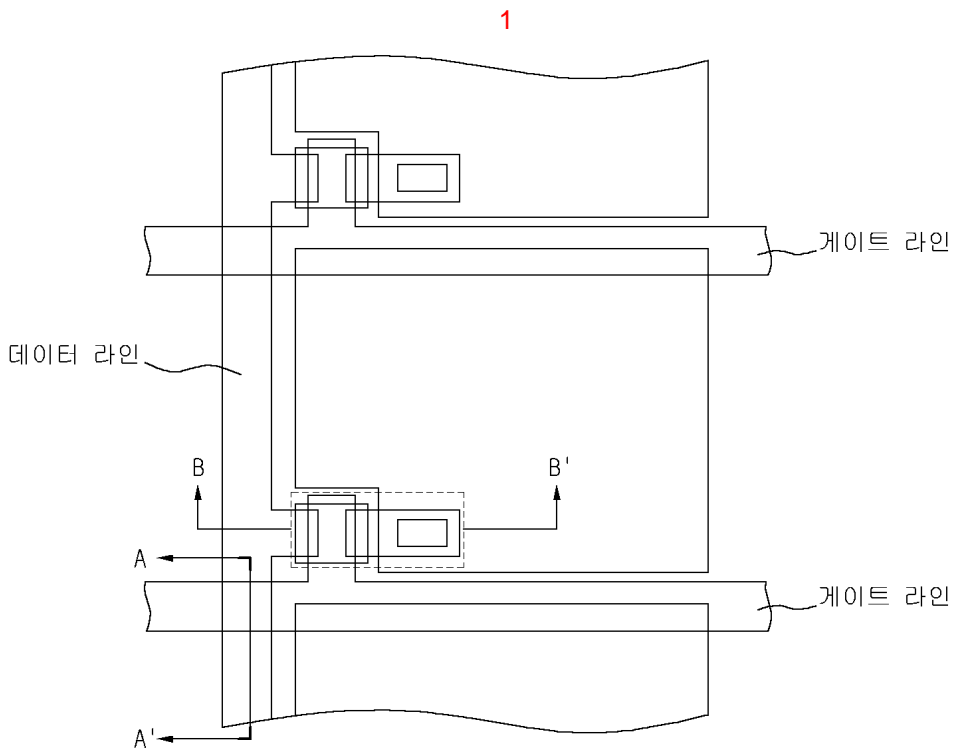
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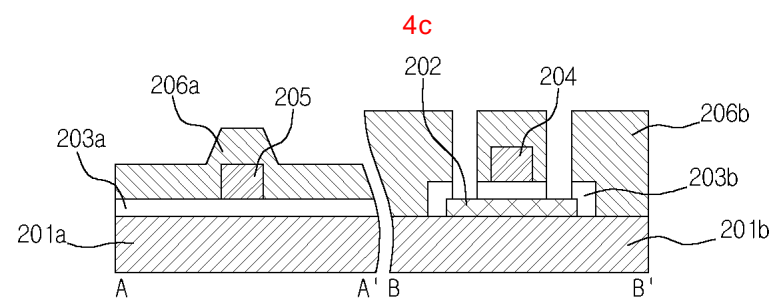
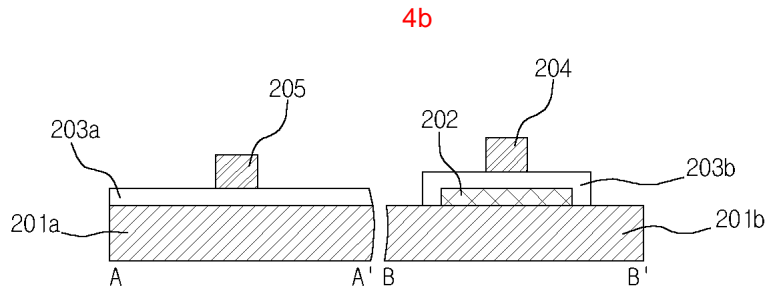
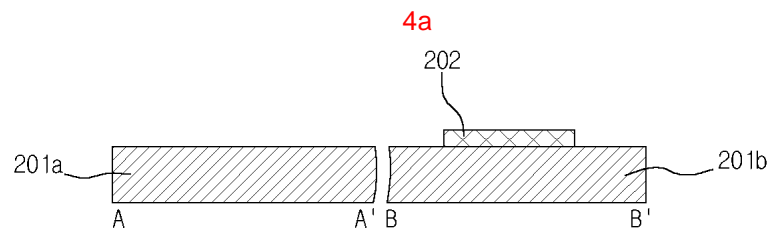
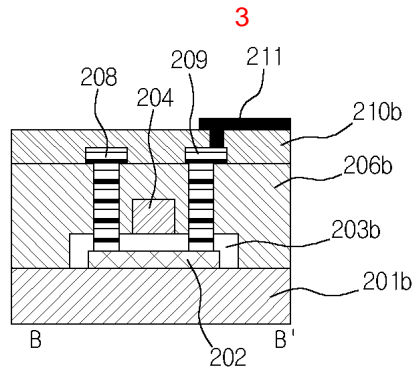
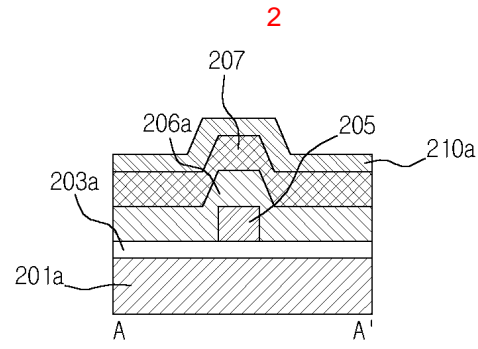
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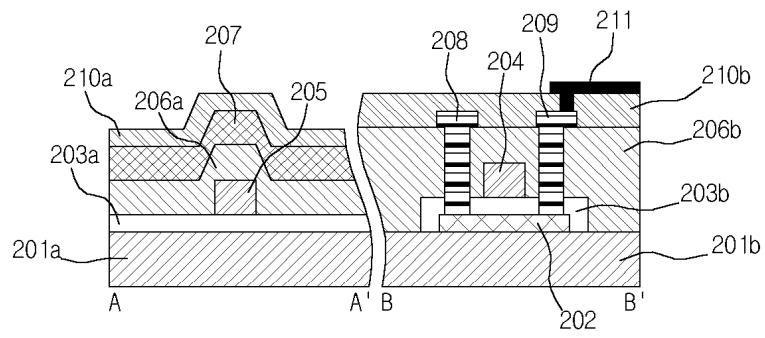
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3



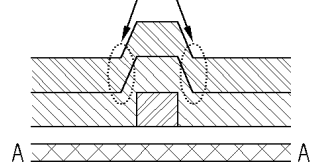


4d

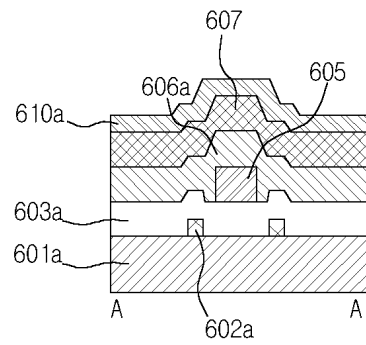


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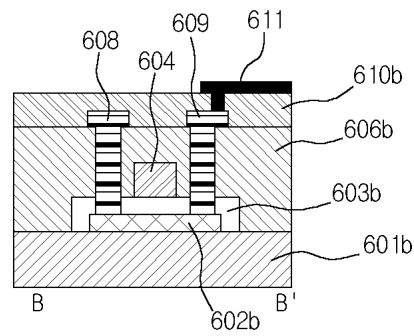
데이터 라인 오픈 발생영역



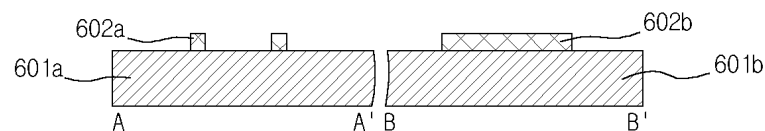
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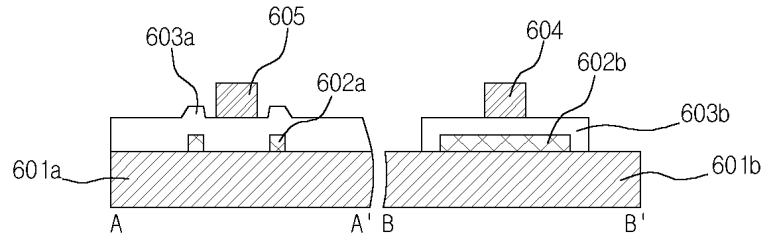
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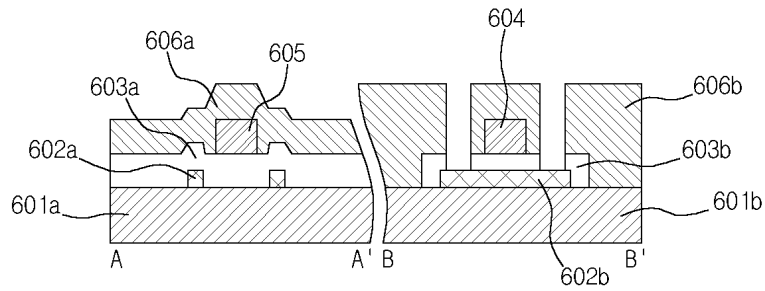
8a



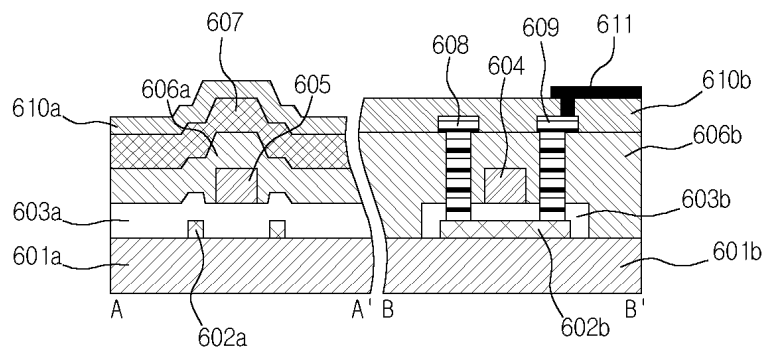
8b



8c



8d



9

