

(19)
(12)

(KR)
(A)

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2002 - 0037528
2002 05 22

(21)
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10 - 2000 - 0067476
2000 11 14

(71)

3 416

(72)

APT235 1401

(74)

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(54)

가

1 2

1 2

2e

1 ;

2a 2e

*

210 : 212 :

214 : 216 :

218 : 220 :

222 : 1 224 : 2

226 : 3 228 :

가 가 (design rule) 가 가

1 (114, 116) (spacer, 120) DC
(Direct Contact) BC(Buried Contact) (114, 116)
(120) (SAC:Self Aligned Contact) (120)
(etch back)
(114, 116) (120)
(116, 118) 가
1 D (114, 116) 가
(114, 116) (short) 가
(120)

1 1 1 1 2 2

()

2a 2e

1
가

2

2a 2e

2a , (212) (210) (polycrystalline silicon lay
er, 214) (214) (doped poly - Si layer)
(silicide) (216) (216) (W)
(218) (218)
(220) (220)

2b , (220) (214)
(218) (216) (220)
(210) 1 (222) (conformal) 1 (222)
(214) (etch selectivity)가

2c , 1 (222) (etch back) (218)
(216) 1 (222a)가 (218) 1 (222a)
(214) (218) (214) (210)

2d , (210) 2 (224) 2 (224)
, 1 (218, 222a, 214) 2 (224)가
(216) 가

2e , (210) USG(Undoped Silicate Glass) (226)
(214, 216, 218) (218) USG (226) (CM
P:Chemical Mechanical Polishing)
USG (226) (212)
(228) (228) (210)
(228) (CMP)

가 (SAC pad, 228)가 (216)
(228) (short)

가 .

(57)

1.

(210) , (214, 216, 218)

;

(218) (216) ;

1 (222) ;

1 (222) (218) (216) 1 (222a)
;

(218) 1 (222a) (214)

;

(210) 2 (224) ;

2 (224) 1 (222a) (214) 2
(224)

2.

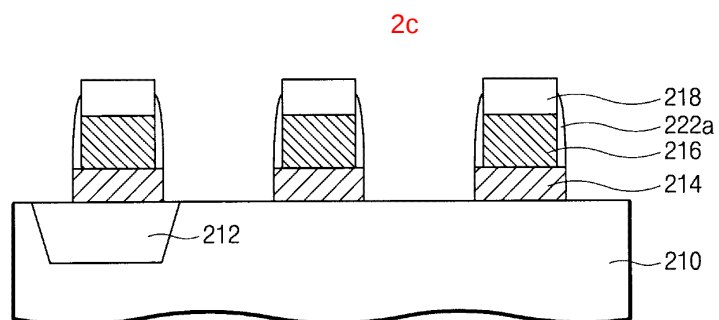
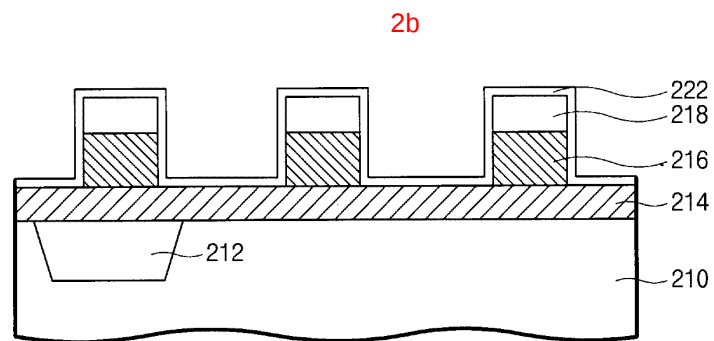
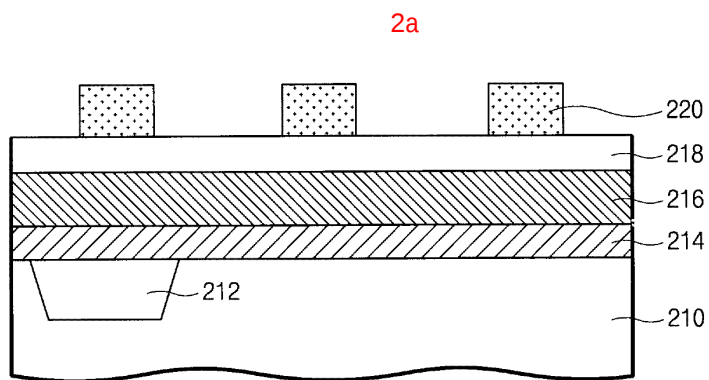
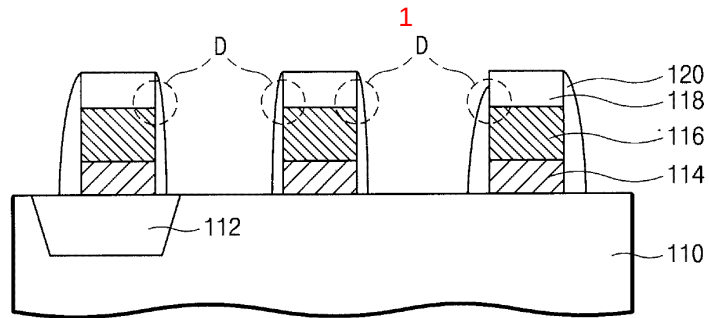
1 ,

1 (222a) (214) 가 ,

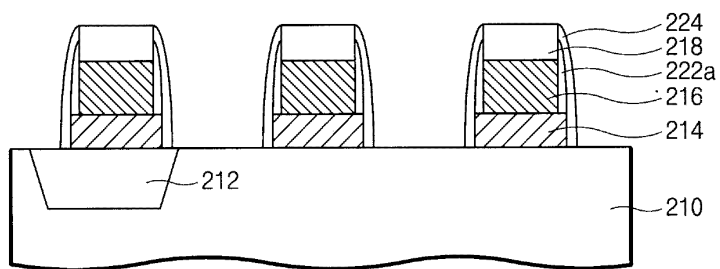
3.

1 ,

2 (224)



2d



2e

