

(19)  
(12)

(KR)  
(B1)

(51) 。 Int. Cl.<sup>7</sup>  
H01L 21/205

(45)  
(11)  
(24)

2005 01 13  
10-0465601  
2004 12 30

(21) 10-2002-0042058  
(22) 2002 07 18

(65)  
(43)

10-2004-0008421  
2004 01 31

(73) 136-1

(72) 5 111-88 301

136-1

543-1 2 202-1904

(74)

:

(54)

가 , ( void )  
HDP CVD ( high density plasma chemical vapor deposition )  
HDP CVD  
가 CD - ( non-void ) HDP CVD  
가 .

6b

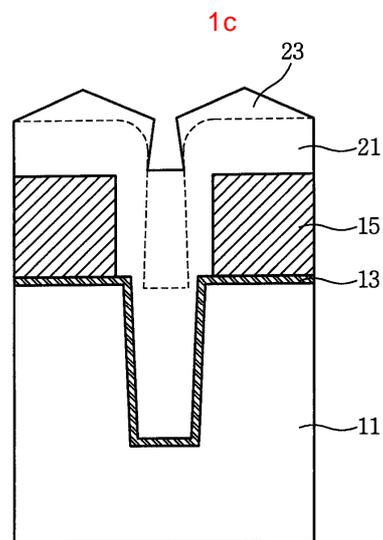
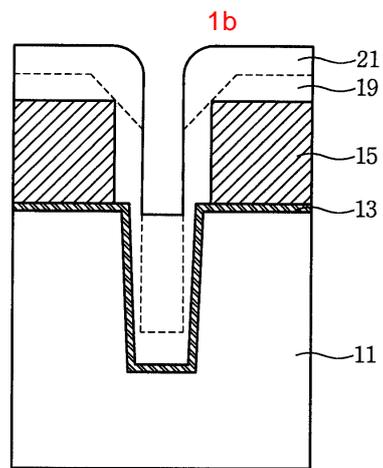
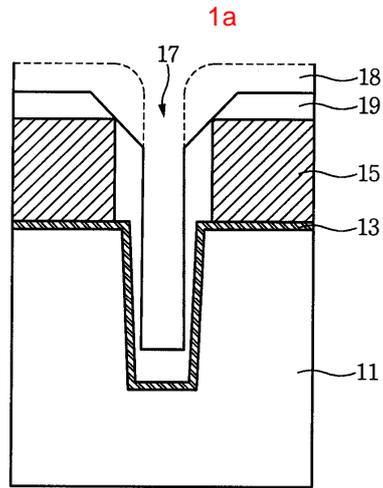
1a 1d 1  
2 1  
3 2  
4a 4e 1  
5 1

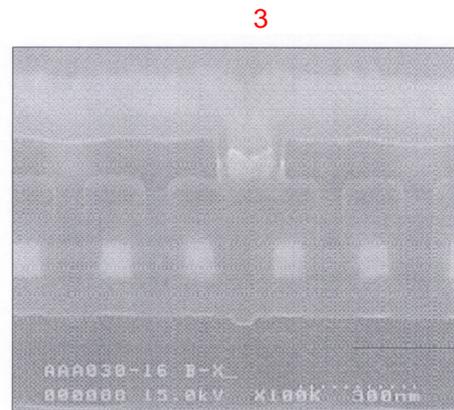
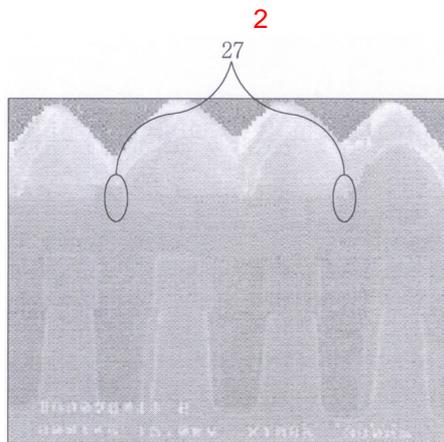
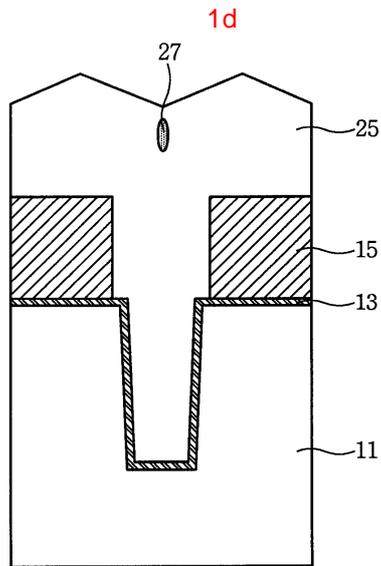
6 2 .  
 < >  
 11,31,51 : 13,33 :  
 15,35 : 17,36 :  
 18,19,21,23,25,37,39,41,43,44,45,59,61 : HDP CVD  
 27,57 : 53 : , BPSG  
 55 : 63 :

( void ) 가 , HDP CVD ( dishing )  
 HDP CVD 가 가  
 , 가  
 1a 1d 1 , ( gap fill )  
 1a 가 (11) (13) (15)  
 , ( ) (15), (13)  
 (11) (17)  
 , HDP CVD HDP CVD 가 가  
 , HDP CVD 가 가  
 1a 1HDP CVD (18) '19' 1 HDP CVD (18) 1  
 1b 1d , '19', '21', '23' '25' (17)  
 ) , '27' ( void ) 가  
 2 1d 가  
 3 BPSG 가 가 ( gap fi  
 BPSG 가  
 II ) ( cleaning )  
 ( bridge ) 가  
 ,  
 HDP CVD BPSG 가  
 ,  
 가  
 ,  
 HDP CVD HDP  
 CVD ,

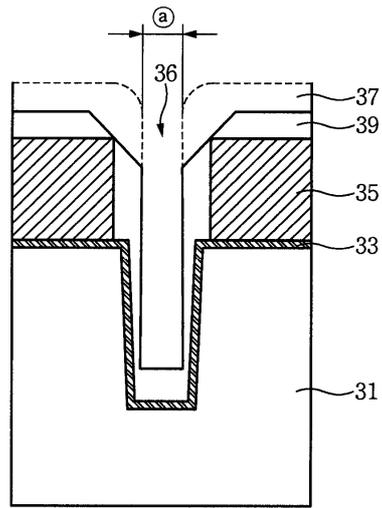




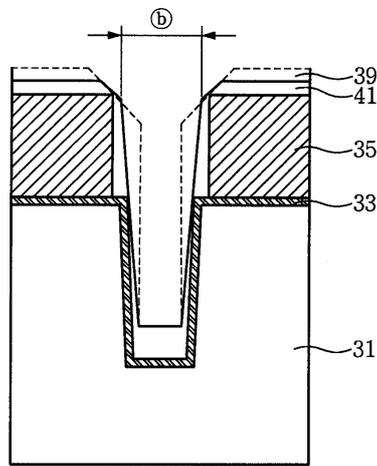




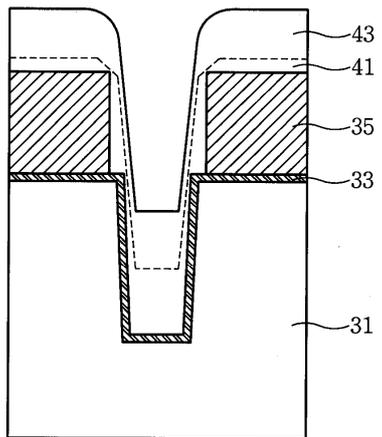
4a



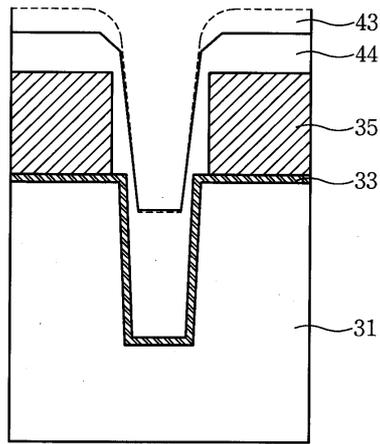
4b



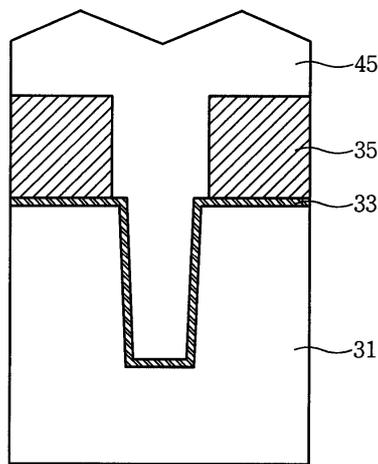
4c



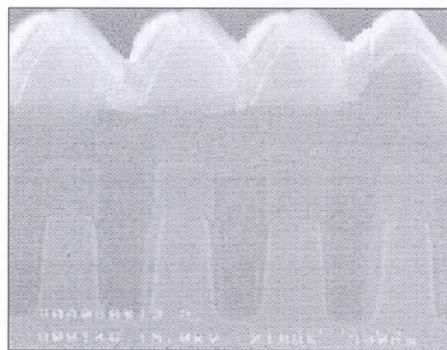
4d



4e



5



6a

