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2003 07 25

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(22) 2000 12 29

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(43)

2002-0056009  
2002 07 10

(73)

136-1

(72)

가 106 201

(74)

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(54)

TEOS TEOS 가 BPSG , TEOS  
S , 1 BPSG 2 T , BPSG , TEO  
, TEOS , BPSG

3e

1a 1d  
2a 2b 0.13μm  
3a 3e



TEOS 가 BPSG , TEOS , TEOS  
 BPSG , TEOS , 1  
 2 , T , BPSG , TEOS , BPSG

3a 3e (Cu) ( ) (21) (22)  
 3a (22) 가 TEOS(Tetra Ethyl Ortho Silicate) (23) BPS  
 G(Boron Phosphorus Silicate Glass) (24)  
 TEOS (23) BPSG (24) HF 9:1 BOE 10:1  
 가 TEOS (23) 8000 , 가 BPSG (24) 5000

3b , BPSG (24) (25) , (25)

3c (25) BPSG (24) TEOS (23)  
 (dry etch) 1 2 BPSG (24) 가  
 BPSG (24) TEOS (23)

TEOS (23) BPSG (24) TEOS (23) "T"  
 3d (25) , "T" BPSG (24) TEOS (23)  
 (21) (26) BPSG (24) TEOS (23) 가  
 (26)

BPSG (24) (26) CMP  
 HSQ(Hydrogen Silsequioxane)

3e , BPSG (24) TEOS (23) (27) (28)  
 , (27) (22) (21)  
 (27) (28)  
 CMP

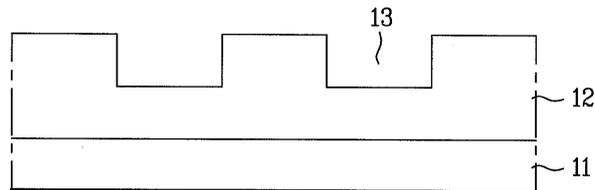
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(57)

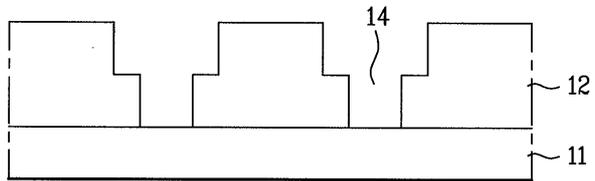
1.

	TEOS							
TEOS	TEOS	가	BPSG					
BPSG								
			BPSG , TEOS			1		2
T								
BPSG								
BPSG	, TEOS							
2.								
1	,	TEOS	BPSG	HF	9:1 BOE	10:1		
3.								
1	,	TEOS	8000					
4.								
1	,	BPSG	5000					
5.								
1	,						BPSG	
6.								
1	,	CMP						
			HSQ					

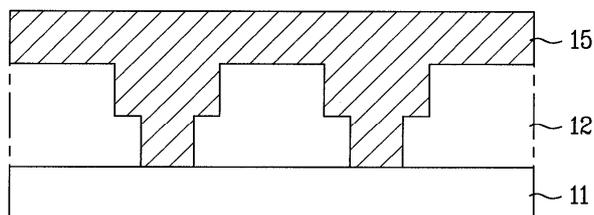
1a



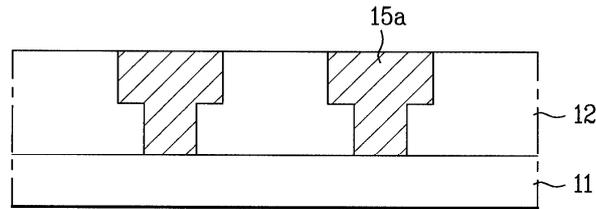
1b



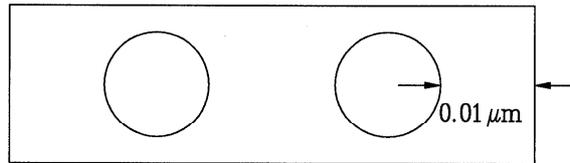
1c



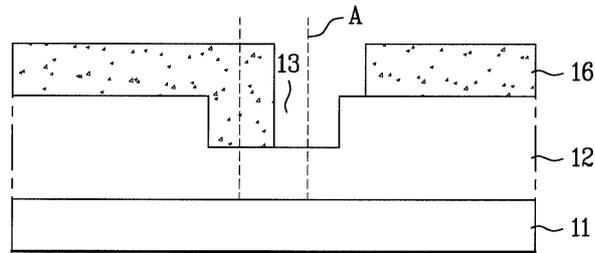
1d



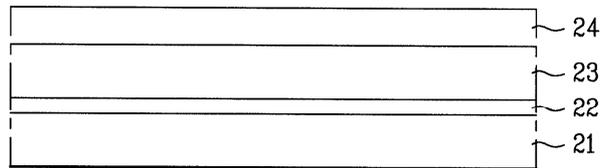
2a



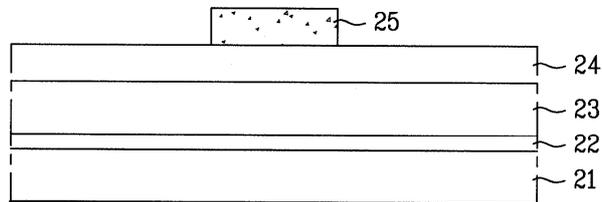
2b



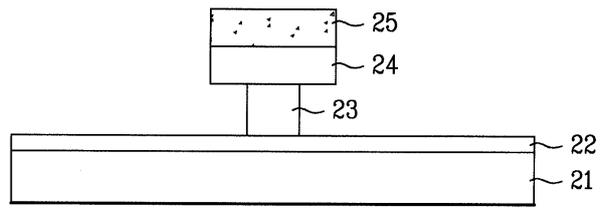
3a



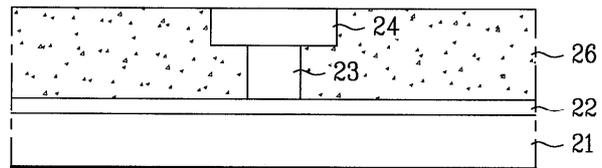
3b



3c



3d



3e

