

A: B:
 11: 12:
 13: 14: 1
 15: 16: /
 17: 18: 2
 19: 20:
 21: 22:
 23: 24:
 25: 26:

가 가
 MOSFET(Metal Oxide Semiconductor Field Effect Tra
 nsistor)
 가 , 가 가 가 (Lithograp
 hy)
 가 가 (Short Channel Effect)
 (Reverse Short Channel Effect)가
 (Gate Induced Drain Leakage; GIDL) (Pu
 nch Through) 가 (I_{off} Leakage) 가, /
 (Junction Capacitance) 가,
 (High Current Drivability),
 가 가
 가 가

(15) (12) ()

(, Sacrificial Oxide) (Threshold Volta

ge; Vth) (C) (19)

(20, Gate Oxide)

(B), (BF2), (As), (In), (Sb)

(C) 6

(21) (Doped Polysilicon) (

Amorphous Silicon) (Chemical Mechanical Polishi

ng; CMP) (Blanket Etchback)

7 (21) / (16) (2

2, Silicide) (17) (BPSG) (23)

(22) (21) / (16) 가

(23) 8 / (16) (21)

(24), (25), (26)

PMOSFET NMOSFET

/ (16) / (16) (15) (12)

/3 가가 가 1

가 가

(57)

1.

1 1 , ,

2 ; 2 / , 1

1 /

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/ 2

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2

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, /

2.

1 ,

3.

2 , / 1
가 1:1:1

4.

1 , / 2 가

5.

1 4 , 2

6.

1 , 2

7.

1 ,

8.

7 , ,

9.

1 ,

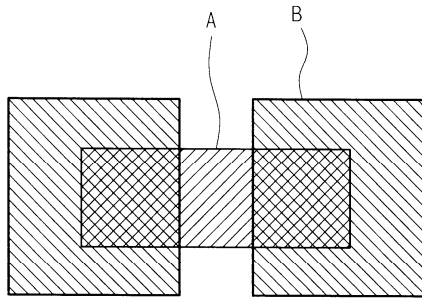
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1 9 , /

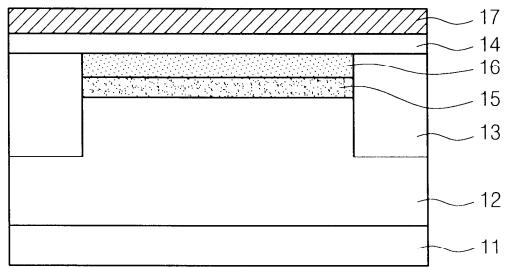
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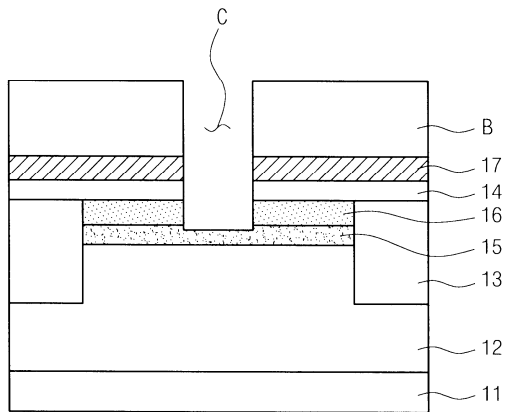
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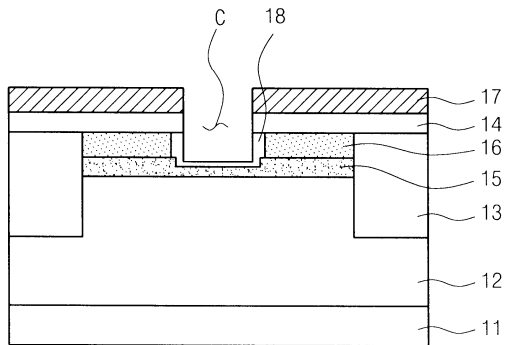
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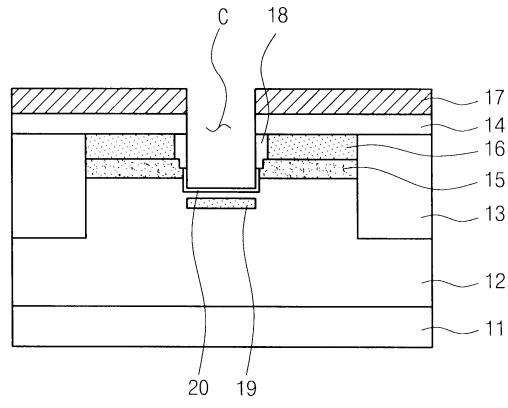
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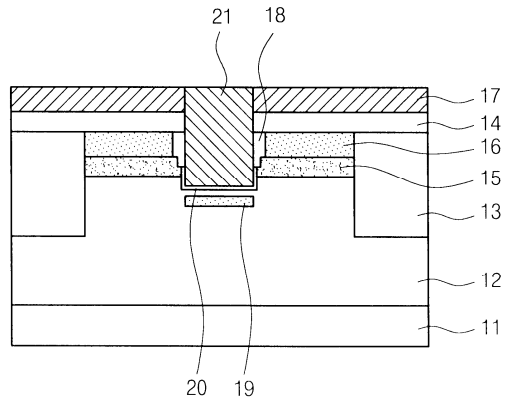
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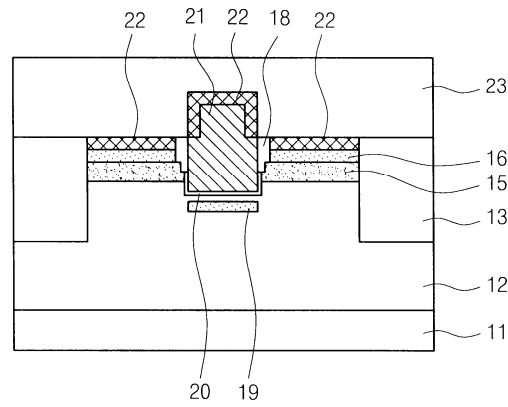
5



6



7



8

