

(19)
(12)

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(24)

2003 01 30
10 - 0370169
2003 01 15

(21) 10 - 2000 - 0008831
(22) 2000 02 23

(65) 2001 - 0084064
(43) 2001 09 06

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(72) 660 - 44 102 805

가 101 1403

(74)

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(54)

1

2

2

가

2e

1a 1d

2a 2e

201 : 1 202 :

203 : 2 204 :

205 : 206 :

207 : 208 :

209 :

(DRAM) 가 가 (cell) (area)가 ,
 (capacitor) (capacitor)가 BST (Ba : barium, Sr : strontium, T
 i : titanium) Pt(platinum), Ru(ruthnum)

1a 1d

1 (101)

가

1a (101) , (102) 1 .

2) , CMP(chemical mechanical polishing) (10

(102) 1 (101) (103) 2 (104)

(103) 1 (101)
(each spopper)

1b each) , 2 (104) 2 (103) (104) (wet

1c 1 (101) , CVD(Chemical Vapor Deposition) 2 (104)
(102) (barrier) (105) , MOCVD(Metal Organic Chemical Vapor Deposition)
(105) (106)

(spin coat) (106) (107)

(106) Pt(platinum, Ru(ruthenium))

1d (107) (107) (each back) 2 (104)가
(107) (106) (105) MOCVD (108)

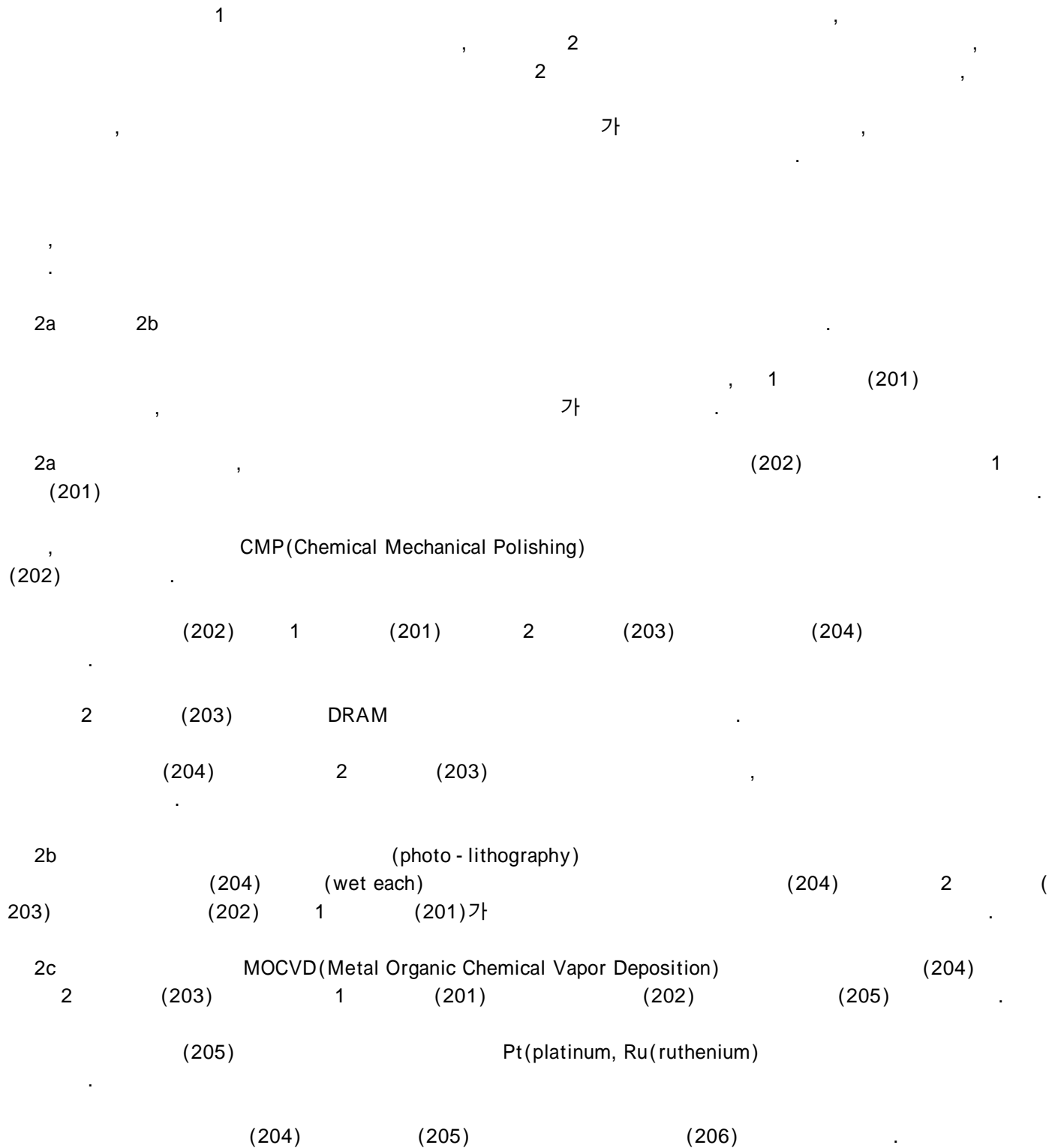
(108) BST(Ba : barium, Sr : strontium, Ti : titanium)

(108) (109)

ance) , (wafer) 가 (top) (perform

가 가 (current leakage path)

Pt(platinum, Ru(ruthenium))



2d O₂ (206) (2
07)

2e (207) (205) MOCVD(Metal Organic Chemica
I Vapor Deposition) (208)

(208) BST(Ba : barium, Sr : strontium, Ti : titanium), TaO₂, AlO₃

(207)

(209)

가

mage)

(plasma da

(57)

1.

1

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2

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가

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2.

1

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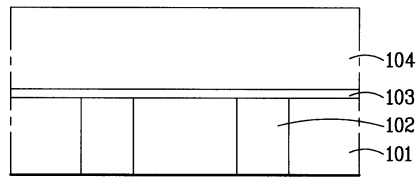
3.

1 ,

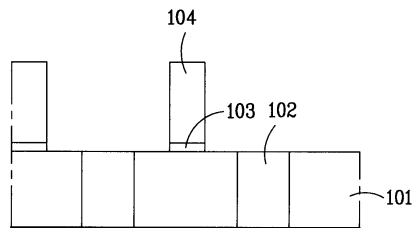
2 가 .

4.

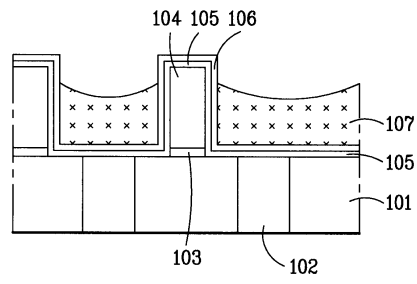
1a



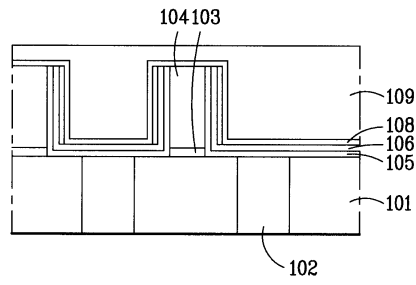
1b



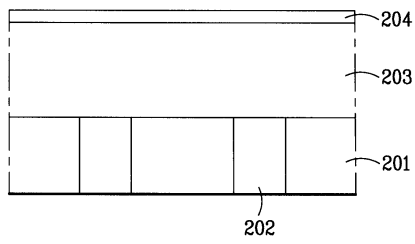
1c



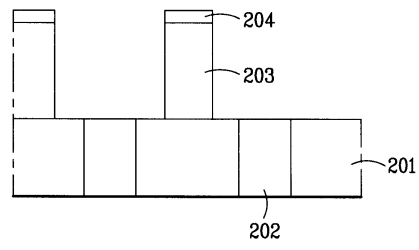
1d



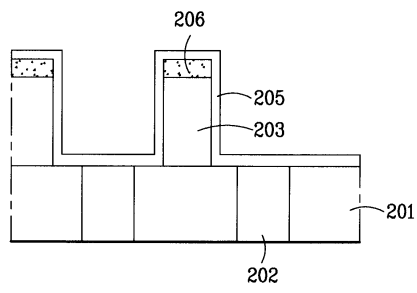
2a



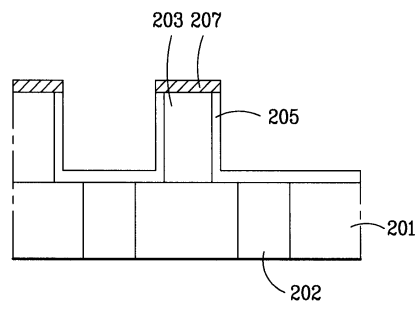
2b



2c



2d



2e

