

Title (en)

METHOD FOR MASKING A RECESS IN A STRUCTURE WITH A LARGE ASPECT RATIO

Title (de)

VERFAHREN ZUR MASKIERUNG EINER AUSNEHMUNG EINER STRUKTUR MIT EINEM GROSSEN ASPEKTVERHÄLTNIS

Title (fr)

PROCEDE POUR MASQUER UN CREUX D'UNE STRUCTURE PRESENTANT UN GRAND FACTEUR DE FORME

Publication

EP 1466351 A1 20041013 (DE)

Application

EP 03701495 A 20030108

Priority

- DE 10201178 A 20020115
- EP 0300087 W 20030108

Abstract (en)

[origin: DE10201178A1] Masking first recesses of a structure having large aspect ratio comprises applying filler layer (5) so that a hollow space (6) is formed in first recesses, and removing filler layer up to hollow space region by etching. Etching is also carried out in hollow space, and filler layer is removed more quickly from first recesses than from further recesses. Etching process is stopped after removing filler layer from first recesses.

Preferred Features: The etching process is an isotropic etching process. The structure has connectors (4) having a sacrificial layer applied on the surface before applying the filler layer. The filler layer is a silicon oxide layer deposited using a TEOS process.

IPC 1-7

H01L 21/033

IPC 8 full level

H01L 21/033 (2006.01)

CPC (source: EP KR US)

H01L 21/033 (2013.01 - KR); **H01L 21/0337** (2013.01 - EP US); **H01L 21/76** (2013.01 - KR)

Citation (search report)

See references of WO 03060966A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

DE 10201178 A1 20030626; EP 1466351 A1 20041013; KR 100620978 B1 20060914; KR 20040076888 A 20040903;
TW 200305969 A 20031101; US 2005224451 A1 20051013; US 7261829 B2 20070828; WO 03060966 A1 20030724

DOCDB simple family (application)

DE 10201178 A 20020115; EP 0300087 W 20030108; EP 03701495 A 20030108; KR 20047010873 A 20030108; TW 91137127 A 20021224;
US 50146405 A 20050408