

Title (en)

PROCESS FOR MANUFACTURING ROUNDED POLYSILICON ELECTRODES ON SEMICONDUCTOR COMPONENTS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON VERRUNDETEN POLYSILIZIUMELEKTRODEN AUF HALBLEITERBAUELEMENTEN

Title (fr)

PROCEDE DE PRODUCTION D'ELECTRODES EN POLYSILICIUM ARRONDIES SUR DES COMPOSANTS A SEMI-CONDUCTEURS

Publication

EP 1728268 A1 20061206 (DE)

Application

EP 06700494 A 20060113

Priority

- EP 2006000287 W 20060113
- DE 102005004596 A 20050201

Abstract (en)

[origin: WO2006081929A1] A polysilicon layer for a polysilicon electrode (8) is structured by means of a lacquer mask (5) and an auxiliary layer (4) made of a material suitable as antireflection layer. The auxiliary layer (4) is provided with lateral cavities such that the polysilicon electrode is etched with rounded edges (7). The auxiliary layer is preferably made of a soluble material and with a thickness ranging from 70 nm to 80 nm. A base layer (2) may be provided as gate dielectric of storage cell transistors and additionally as etching stop layer.

IPC 8 full level

H01L 21/027 (2006.01); **H01L 21/28** (2006.01)

CPC (source: EP US)

H01L 21/0276 (2013.01 - EP US); **H01L 21/32139** (2013.01 - EP US); **H01L 29/40114** (2019.07 - EP US)

Citation (search report)

See references of WO 2006081929A1

Designated contracting state (EPC)

FR GB IE IT

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

DE 102005004596 A1 20060810; **DE 102005004596 B4 20110915**; EP 1728268 A1 20061206; TW 200639948 A 20061116; US 2009197407 A1 20090806; US 7867837 B2 20110111; WO 2006081929 A1 20060810

DOCDB simple family (application)

DE 102005004596 A 20050201; EP 06700494 A 20060113; EP 2006000287 W 20060113; TW 95102416 A 20060123; US 79593306 A 20060113