

Title (en)

METHOD OF FORMING DIELECTRIC LAYERS WITH LOW DIELECTRIC CONSTANTS

Title (de)

VERFAHREN ZUR ERZEUGUNG DIELEKTRISCHER SCHICHTEN MIT NIEDRIGEN DIELEKTRIZITÄTSKONSTANTEN

Title (fr)

PROCEDE DE FORMATION DE COUCHES DIELECTRIQUES A FAIBLES CONSTANTES DIELECTRIQUES

Publication

**EP 1668683 A1 20060614 (EN)**

Application

**EP 04770031 A 20040918**

Priority

- IB 2004051793 W 20040918
- US 50445203 P 20030919

Abstract (en)

[origin: WO2005029567A1] A method (100) of depositing a dielectric material includes providing (101) a substrate with at least one layer over the substrate. The method further includes pre-wetting (102) a top surface of a top layer with a substance, spin coating (103) the solution and forming (104) the dielectric material. The dielectric material is illustratively SiO<sub>2</sub> that is relatively porous, and has a relatively low dielectric constant. The pre-wetting results in a reduction in processing costs due to a reduction in lost solution. Moreover, the dielectric layer (209) has an improved thickness uniformity.

IPC 1-7

**H01L 21/312**; **H01L 21/316**

IPC 8 full level

**H01L 21/312** (2006.01); **H01L 21/316** (2006.01)

CPC (source: EP KR)

**H01L 21/02126** (2013.01 - EP KR); **H01L 21/02203** (2013.01 - EP KR); **H01L 21/02216** (2013.01 - EP KR); **H01L 21/02282** (2013.01 - EP KR); **H01L 21/02307** (2013.01 - EP KR)

Citation (search report)

See references of WO 2005029567A1

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 PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2005029567 A1 20050331**; CN 1883038 A 20061220; EP 1668683 A1 20060614; JP 2007506276 A 20070315; KR 20060096996 A 20060913

DOCDB simple family (application)

**IB 2004051793 W 20040918**; CN 200480034184 A 20040918; EP 04770031 A 20040918; JP 2006526795 A 20040918; KR 20067005506 A 20060320