

Title (en)
INSULATION LAYER MATERIAL FOR MICROELECTRONICS

Title (de)
ISOLATIONSSCHICHTMATERIAL FÜR DIE MIKROELEKTRONIK

Title (fr)
MATÉRIAU À COUCHE ISOLANTE POUR LA MICROÉLECTRONIQUE

Publication
EP 2027597 A1 20090225 (DE)

Application
EP 07785816 A 20070607

Priority

- EP 2007005203 W 20070607
- DE 102006027880 A 20060609

Abstract (en)
[origin: WO2007141048A1] The invention deals with the fields of microelectronics and material technology and relates to an insulation layer material for microelectronics which can be used, for example, in integrated circuits as a dielectric between copper conductor tracks. The invention addresses the problem of providing an insulation layer material for microelectronics which has a dielectricity constant of $k < 2$ whilst also having good mechanical properties. The problem is solved with an insulation layer material for microelectronics which consists of a plurality of fluorinated carbon nanotubes which are connected to a network, at least at certain points, by means of physical and/or chemical connections, using a bonding agent.

IPC 8 full level
H01L 21/312 (2006.01)

CPC (source: EP)
B82Y 10/00 (2013.01); **H01L 21/0212** (2013.01); **H01L 21/02203** (2013.01); **H10K 85/221** (2023.02)

Citation (search report)
See references of WO 2007141048A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
DE 102006027880 A1 20071213; **DE 102006027880 B4 20081127**; EP 2027597 A1 20090225; WO 2007141048 A1 20071213

DOCDB simple family (application)
DE 102006027880 A 20060609; EP 07785816 A 20070607; EP 2007005203 W 20070607