

Title (en)

GLASS PANEL INCLUDING A SUBSTRATE COATED WITH A STACK THAT INCLUDES AT LEAST ONE SILVER FUNCTIONAL LAYER

Title (de)

GLASSCHEIBE MIT SUBSTRAT MIT EINER BESCHICHTUNG MIT EINEM STAPEL AUS MINDESTENS EINER SILBERFUNKTIONSSCHICHT

Title (fr)

VITRAGE COMPRENANT UN SUBSTRAT REVETU D'UN EMPILEMENT COMPRENANT AU MOINS UNE COUCHE FONCTIONNELLE A BASE D'ARGENT

Publication

EP 3262005 A1 20180103 (FR)

Application

EP 16713528 A 20160224

Priority

- FR 1551592 A 20150225
- FR 2016050427 W 20160224

Abstract (en)

[origin: WO2016135420A1] The invention relates to a material including a transparent substrate coated with a stack of thin layers including at least one silver functional metal layer that contains a doping element having a thickness E, is formed from monocrystalline grains having a side dimension D defined as a chord of the grain edge, and is characterized in that the ratio D/E is greater than 1.05. Said material is characterized by a stack of thin layers including at least one silver functional metal layer arranged between two dielectric material coatings. Said dielectric coatings include at least one dielectric layer, advantageously located on the bottom of said silver functional layer and made of optionally doped zinc oxide. The invention also relates to the method for preparing such a material, said method including a step for laterally growing the grains via heat treatment. Said growth is induced by diffusing the doping elements.

IPC 8 full level

C03C 17/00 (2006.01); **C03C 17/36** (2006.01); **C08J 7/00** (2006.01)

CPC (source: EP US)

C03B 27/012 (2013.01 - US); **C03C 17/002** (2013.01 - EP US); **C03C 17/3626** (2013.01 - US); **C03C 17/3644** (2013.01 - US); **C03C 17/3647** (2013.01 - EP US); **C03C 17/3649** (2013.01 - US); **C03C 17/366** (2013.01 - EP US); **C03C 17/3681** (2013.01 - EP US); **C03C 2217/216** (2013.01 - US); **C03C 2217/24** (2013.01 - US); **C03C 2217/256** (2013.01 - US); **C03C 2217/261** (2013.01 - US); **C03C 2217/281** (2013.01 - US); **C03C 2218/156** (2013.01 - US)

Citation (search report)

See references of WO 2016135420A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

FR 3032959 A1 20160826; EP 3262005 A1 20180103; US 2018072616 A1 20180315; WO 2016135420 A1 20160901

DOCDB simple family (application)

FR 1551592 A 20150225; EP 16713528 A 20160224; FR 2016050427 W 20160224; US 201615553369 A 20160224