

Title (en)

Production of conductive surface coatings with dispersion with electrostatically stabilised silver nanoparticles

Title (de)

Herstellung leitfähiger Oberflächenbeschichtungen mit Dispersion mit elektrostatisch stabilisierten Silbernanopartikeln

Title (fr)

Fabrication de revêtements de surface conducteurs ayant une dispersion à nanoparticules d'argent stabilisées électrostatiquement

Publication

**EP 2369597 B1 20140625 (DE)**

Application

**EP 10002605 A 20100312**

Priority

EP 10002605 A 20100312

Abstract (en)

[origin: EP2369597A1] Forming a conductive coating on the surface, comprises providing a substrate having a surface applying a dispersion to the surface, where the dispersion comprises at least one liquid dispersant, and electrostatically stabilized silver nanoparticles having a zeta potential of -20 to -55 mV in the dispersant at a pH value of 2-10, and heating one or both of the surface and the dispersion applied on it to a temperature of 50[deg] C below the boiling point of the dispersant to 150[deg] C above the boiling point of the dispersant. Independent claims are also included for: (1) the dispersion comprising the components as above per se and optionally further additives; and (2) preparation of the dispersion, comprising reducing a silver salt to silver with a reducing agent in at least one dispersant in the presence of at least one electrostatic dispersion stabilizer.

IPC 8 full level

**H01B 1/22** (2006.01)

CPC (source: EP KR US)

**H01B 1/02** (2013.01 - KR); **H01B 1/22** (2013.01 - EP US); **H01B 13/00** (2013.01 - KR); **Y10S 977/773** (2013.01 - EP US); **Y10S 977/892** (2013.01 - EP US)

Cited by

CN108348884A; WO2017071949A1

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

**EP 2369597 A1 20110928; EP 2369597 B1 20140625**; CA 2733600 A1 20110912; CN 102189072 A 20110921; CN 102189072 B 20160210; DK 2369597 T3 20141006; EP 2369598 A1 20110928; ES 2495390 T3 20140917; HK 1162395 A1 20120831; JP 2011190535 A 20110929; KR 20110103351 A 20110920; PL 2369597 T3 20150331; PT 2369597 E 20140923; TW 201217070 A 20120501; TW I592221 B 20170721; US 2011223322 A1 20110915; US 8834960 B2 20140916

DOCDB simple family (application)

**EP 10002605 A 20100312**; CA 2733600 A 20110309; CN 201110058677 A 20110311; DK 10002605 T 20100312; EP 11157252 A 20110308; ES 10002605 T 20100312; HK 12102639 A 20120315; JP 2011054046 A 20110311; KR 20110021860 A 20110311; PL 10002605 T 20100312; PT 10002605 T 20100312; TW 100108208 A 20110311; US 201113044129 A 20110309