

## 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 A1 20110928 (DE)**

## Application

**EP 10002605 A 20100312**

## Priority

EP 10002605 A 20100312

## Abstract (en)

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.

## Abstract (de)

Die vorliegende Erfindung betrifft ein Verfahren zur Herstellung leitfähiger Oberflächenbeschichtungen mit Dispersion mit elektrostatisch stabilisierten Silbernanopartikeln, für dieses Verfahren besonders geeignete Dispersionen sowie ein Verfahren zu deren Herstellung.

## 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)

## Citation (applicant)

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## Citation (search report)

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## Designated contracting state (EPC)

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## Designated extension state (EPC)

AL BA ME RS

## DOCDB simple family (publication)

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## 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