

Title (en)

METHOD FOR PRODUCING A METAL NANOPARTICLE DISPERSION, METAL NANOPARTICLE DISPERSION, AND USE OF SAID METAL NANOPARTICLE DISPERSION

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER METALLNANOPARTIKELDISPERSION, METALLNANOPARTIKELDISPERSION SOWIE DEREN VERWENDUNG

Title (fr)

PROCÉDÉ DE PRÉPARATION D'UNE DISPERSION DE NANOParticules MÉTALLIQUES, DISPERSION DE NANOParticules MÉTALLIQUES ET UTILISATION DE LADITE DISPERSION

Publication

EP 2773477 A1 20140910 (DE)

Application

EP 12780733 A 20121030

Priority

- DE 102011085642 A 20111103
- EP 2012071499 W 20121030

Abstract (en)

[origin: CA2854227A1] The invention relates to a method for producing a metal nanoparticle dispersion, in particular a silver nanoparticle dispersion, wherein after the production of nanoscale metal particles, stabilized by means of at least one auxiliary dispersing agent containing at least one free carboxylic acid group or salt thereof as a functional group, in at least one liquid dispersant (solvent), flocculation of the metal nanoparticles is deliberately caused, the formed metal nanoparticle flocculation is dispersed again in at least one liquid dispersant, optionally by adding a base, and the metal nanoparticle dispersion is set to a desired metal nanoparticle concentration. The invention further relates to a metal nanoparticle dispersion, in particular a silver nanoparticle dispersion, in particular produced by means of the method according to the invention, and to the use of said metal nanoparticle dispersion.

IPC 8 full level

B22F 9/18 (2006.01); **B22F 1/0545** (2022.01); **B22F 9/24** (2006.01)

CPC (source: EP US)

B22F 1/0545 (2022.01 - EP US); **B82Y 30/00** (2013.01 - EP); **C09D 11/52** (2013.01 - US); **B22F 9/24** (2013.01 - EP US)

Citation (search report)

See references of WO 2013064502A1

Cited by

EP3028792A1

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)

DE 102011085642 A1 20130508; BR 112014010704 A2 20170425; CA 2854227 A1 20130510; CN 104254418 A 20141231;
EP 2773477 A1 20140910; HK 1204593 A1 20151127; JP 2015501390 A 20150115; KR 20140093704 A 20140728;
SG 11201402023U A 20140926; US 2014299821 A1 20141009; WO 2013064502 A1 20130510

DOCDB simple family (application)

DE 102011085642 A 20111103; BR 112014010704 A 20121030; CA 2854227 A 20121030; CN 201280060508 A 20121030;
EP 12780733 A 20121030; EP 2012071499 W 20121030; HK 15105092 A 20150528; JP 2014539312 A 20121030;
KR 20147014985 A 20121030; SG 11201402023U A 20121030; US 201214355639 A 20121030