

Title (en)  
NICKEL-PLATING ADDITIVE AND SATIN NICKEL-PLATING BATH CONTAINING SAME

Title (de)  
VERNICKELUNGSADDITIV UND SATINVERNICKELUNGSBAD DAMIT

Title (fr)  
ADDITIF DE PLACAGE DE NICKEL ET BAIN DE PLACAGE DE NICKEL SATINÉ LE CONTENANT

Publication  
**EP 3372709 A1 20180912 (EN)**

Application  
**EP 15907841 A 20151106**

Priority  
JP 2015081404 W 20151106

Abstract (en)  
Provided are a technique with which a satin-like appearance can be obtained in nickel-plating by a nickel-plating additive characterized by containing a benzethonium salt, a satin nickel-plating bath containing the same, and a satin nickel-plating method using the same.

IPC 8 full level  
**C25D 3/12** (2006.01)

CPC (source: EP KR US)  
**C25D 3/12** (2013.01 - EP KR US); **C25D 5/627** (2020.08 - KR); **C25D 7/00** (2013.01 - KR)

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)  
**EP 3372709 A1 20180912; EP 3372709 A4 20190619**; CN 108350589 A 20180731; JP WO2017077655 A1 20180816;  
KR 20180078227 A 20180709; MX 2018005706 A 20190314; US 2018327922 A1 20181115; US 2021130969 A1 20210506;  
WO 2017077655 A1 20170511

DOCDB simple family (application)  
**EP 15907841 A 20151106**; CN 201580084219 A 20151106; JP 2015081404 W 20151106; JP 2017548607 A 20151106;  
KR 20187008422 A 20151106; MX 2018005706 A 20151106; US 201515773840 A 20151106; US 202117146898 A 20210112