

Title (en)

ELECTROLESS NICKEL COATINGS AND COMPOSITIONS AND METHODS FOR FORMING THE COATINGS

Title (de)

CHEMISCHE VERNICKELUNGSBESCHICHTUNGEN SOWIE ZUSAMMENSETZUNGEN UND VERFAHREN ZUR BILDUNG DERSELBEN

Title (fr)

REVÊTEMENTS AUTOCATALYTIQUES DE NICKEL ET COMPOSITIONS ET PROCÉDÉS DE FORMATION DESDITS REVÊTEMENTS

Publication

EP 2875168 B1 20171220 (EN)

Application

EP 13820572 A 20130717

Priority

- US 201261672584 P 20120717
- US 2013050932 W 20130717

Abstract (en)

[origin: WO2014015063A2] An aqueous electroless nickel plating bath for forming electroless nickel coatings includes nickel, a hypophosphorous reducing agent, zinc, a bismuth stabilizer, and at least one of a complexing agent, a chelating agent, or a pH buffer, and is free of a sulfur compound.

IPC 8 full level

C23C 18/16 (2006.01); **C23C 18/32** (2006.01); **C23C 18/36** (2006.01); **C23C 18/54** (2006.01)

CPC (source: EP US)

C23C 18/1651 (2013.01 - EP US); **C23C 18/1689** (2013.01 - EP US); **C23C 18/32** (2013.01 - US); **C23C 18/36** (2013.01 - EP US); **C23C 18/54** (2013.01 - EP US)

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

DOCDB simple family (publication)

WO 2014015063 A2 20140123; **WO 2014015063 A3 20140320**; BR 112015001113 A2 20170627; BR 112015001113 B1 20210518; CA 2879315 A1 20140123; CA 2879315 C 20190910; EP 2875168 A2 20150527; EP 2875168 A4 20160406; EP 2875168 B1 20171220; ES 2663684 T3 20180416; MX 2015000850 A 20150820; MX 363621 B 20190328; US 2015159277 A1 20150611; US 2022145469 A1 20220512

DOCDB simple family (application)

US 2013050932 W 20130717; BR 112015001113 A 20130717; CA 2879315 A 20130717; EP 13820572 A 20130717; ES 13820572 T 20130717; MX 2015000850 A 20130717; US 201314414821 A 20130717; US 202217585093 A 20220126