

Title (en)

Process for electroplating nickel with satin finish

Title (de)

Verfahren zur galvanischen Abscheidung von blendfreien Nickelniederschlägen

Title (fr)

Procédé de dépôt électrolytique de nickel lisse

Publication

EP 0770710 B2 20020814 (DE)

Application

EP 96116639 A 19961017

Priority

DE 19540011 A 19951027

Abstract (en)

[origin: EP0770710A1] A process for electroplating metal surfaces with non-reflective nickel coatings is operated at 40-75 degrees C with a Watts electrolyte, an electrolyte based on sulphamate, sulphonate or fluoroborate, or a mixture, with the addition of: (A) a conventional basic brightener; and (B) substituted and/or unsubstituted ethylene oxide (EO) adducts, or propylene oxide (PO) adducts, or EO-PO adducts in a concentration of up to 5 mg/l (to produce the non-reflective effect). The concentration of (B) and the temperature of the electrolyte are set as above so that the operating electrolyte appears clear on visual inspection, with practically no scattering of transmitted light.

IPC 1-7

C25D 3/12

IPC 8 full level

C25D 3/12 (2006.01)

CPC (source: EP US)

C25D 3/12 (2013.01 - EP US)

Citation (opposition)

Opponent :

- DE 1621085 A1 19710311 - HENKEL & CIE GMBH
- Römpf Chemielexikon, 9. Auflage 1992, Band 6, Seite 4754
- G. Michael: "Verfahren zur Abscheidung von seidenmatten Nickelüberzügen", Metalloberfläche, Band 25 (1971), Heft 10, Seiten 345-380.
- K. Schulze-Berge: "Blendarmes Glanznickel als Matrix für farbige Beschichtungen, Galvanotechnik, Band 80 (1989), Heft 11, Seiten 3799-3804.
- Merkblatt "Mattierungsbad Supramatt KN 650000" Dr. Hesse & Cie.

Designated contracting state (EPC)

AT DE ES FR GB NL

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