

Title (en)

AQUEOUS ACID ELECTROLYTES CONTAINING NICKEL AND COBALT IONS FOR THE GALVANIC DEPOSITION OF HARDLY DISCOLOURING LUSTROUS WHITE ALLOY COATINGS

Publication

EP 0163944 A3 19860521 (DE)

Application

EP 85105345 A 19850502

Priority

DE 3416993 A 19840509

Abstract (en)

[origin: US4565611A] A process and compositions for the electrodeposition of hard, tarnish-resistant, white shining nickel- and cobalt-containing coatings using aqueous acidic baths containing metal ions and boric acid and also, as shine promotor, an aliphatic aldehyde and an aromatic carbonyl compound and, optionally, wetting agents, wherein aqueous solutions containing nickel, cobalt and chloride ions and boric acid and having a pH-value of from 3.6 to 4.8 and a nickel to cobalt ion ratio of from 8:1 to 20:1 are prepared, an aqueous solution of an aliphatic aldehyde and an aromatic, water-soluble carbonyl compound in a quantitative ratio of from 20:1 to 50:1 is added as shine promotor, layers containing nickel and cobalt are electrodeposited onto base material suitable for nickel plating at a temperature of from 50 DEG to 55 DEG C. and at a cathodic current density of up to 7 A.dm⁻² using nickel and optionally, cobalt metal in a ratio by weight of from 5:1 to 10:1 as the anode material.

IPC 1-7

C25D 3/56; **C25D 3/12**

IPC 8 full level

C25D 13/10 (2006.01); **C25D 3/56** (2006.01)

CPC (source: EP US)

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Citation (search report)

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