

Title (en)

Process and arrangement for the galvanic deposition of nickel, cobalt, nickel alloys or cobalt alloys with periodic current pulses and use of the process

Title (de)

Verfahren und Anordnung zur galvanischen Abscheidung von Nickel, Kobalt, Nickellegierungen oder Kobaltlegierungen mit periodischen Strompulsen und Verwendung des Verfahrens

Title (fr)

Procédé et disposition pour la déposition galvanique de nickel, cobalt, d'alliages de nickel ou de cobalt grâce à des impulsions périodiques de courant et utilisation de ce procédé

Publication

**EP 1213372 B1 20110209 (DE)**

Application

**EP 01128897 A 20011205**

Priority

DE 10061186 A 20001207

Abstract (en)

[origin: US2002084190A1] A method for galvanically depositing nickel, cobalt, nickel alloys or cobalt alloys in a galvanic bath includes using electrolytes containing nickel compounds or cobalt compounds. At least one anode and at least one cathode of the bath are subject to periodic current pulses. The  $I_A/I_C$  ratio of the anode current density  $I_A$  to the cathode current density  $I_C$  is selected to be greater than 1 and smaller than 1.5. The charge ratio  $Q_A/Q_C=TAIA/TCIC$  of the charge  $Q_A$ , transported during an anode pulse of duration  $TA$ , to the charge  $Q_C$  transported during a cathode pulse of duration  $TC$ , is between 30 and 45. A bath for carrying out the method may have contoured anodes, current restrictors, a cleaning device for the electrolyte, and a circulating device with recycling of the electrolyte through nozzles.

IPC 8 full level

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