

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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