

Title (en)
Process for electroplating metal parts.

Title (de)
Verfahren zum Elektroplattieren von Metallteilen.

Title (fr)
Procédé pour électro-plaquer de pièces métalliques.

Publication
EP 0100777 A1 19840222 (EN)

Application
EP 82107250 A 19820810

Priority
EP 82107250 A 19820810

Abstract (en)
This invention is an improved method of producing a coated metal part in a process which comprises electroplating a nickel-zinc coating onto an electrically conductive substrate from a bath containing nickel and zinc ions and removing substantially all the zinc from the coating. The improvement comprises supplying nickel and zinc ions to the bath from a plurality of nickel anodes and a plurality of zinc anodes. The total surface area of the zinc anodes, which projects toward the substrate is about twice as large as the total surface area of the nickel anodes which project toward the substrate. The bath composition is maintained at 0.75 to 1.25 molar nickel and 0.75 to 1.25 molar zinc by operating each anode at about the same current density. Electroplating is continued for a time and at a current density sufficient to deposit a 5 to 100 micron thick nickel-zinc coating onto the substrate. The coating is 60 to 70 weight percent zinc and 30 to 40 weight percent nickel.

IPC 1-7
C25D 3/56; C25D 17/00; C25B 1/04; C25B 1/46

IPC 8 full level
C25B 11/04 (2006.01); **C25D 3/56** (2006.01)

CPC (source: EP)
C25B 11/091 (2021.01); **C25D 3/565** (2013.01)

Citation (search report)
• GB 2059438 A 19810423 - STEEL STRIP CORP THOMAS
• US 4104133 A 19780801 - BRANNAN JAMES R, et al
• US 4313802 A 19820202 - SHIBUYA ATSUYOSHI, et al

Cited by
CN111094632A; CN105063694A; EP0180981A1; EP3695029A4; US10961637B2; US7115197B2

Designated contracting state (EPC)
BE DE FR GB IT NL

DOCDB simple family (publication)
EP 0100777 A1 19840222

DOCDB simple family (application)
EP 82107250 A 19820810