

Title (en)

Electroplating of hot-galvanized steel sheet and continuous plating line therefor

Title (de)

Elektroplattierung von feuerverzinkten Stahlbändern und kontinuierliche Vorrichtung dafür

Title (fr)

Electroplacage de bandes d'acier galvanisées à chaud et installation en continu à cet effet

Publication

EP 0545908 B1 19970730 (EN)

Application

EP 93102764 A 19900507

Priority

- EP 90401217 A 19900507
- JP 30256289 A 19891121
- JP 11479189 A 19890508

Abstract (en)

[origin: EP0545908A2] A continuous multi-layer plating line for steel sheet which includes a hot-galvanizing apparatus to form a galvanized coating and optionally to alloy the coating and an electroplating apparatus to form an electroplated coating on the galvanized coating. Between the hot-galvanizing apparatus and the electroplating apparatus, a post-galvanizing surface treatment apparatus effective for removing surface oxide contaminants and activating the surface of the galvanized coating is disposed and the galvanized steel sheet is treated thereby prior to electroplating. The post-galvanizing surface treatment is carried out by applying an alkali solution having a pH of at least 12 to the surface of the galvanized coating, by alkali electrolysis, by cathodic electrolysis, by cooling the galvanized steel sheet with the said alkali solution, or by skin-pass rolling using the said alkali solution as a skin-pass rolling liquid.

IPC 1-7

C25D 5/36; **C25F 1/06**

IPC 8 full level

C25D 5/36 (2006.01); **C23C 28/02** (2006.01)

CPC (source: EP KR US)

C25D 5/10 (2013.01 - KR); **C25D 5/36** (2013.01 - EP US)

Cited by

CN113061890A

Designated contracting state (EPC)

BE DE FR GB

DOCDB simple family (publication)

EP 0545908 A2 19930609; **EP 0545908 A3 19940112**; **EP 0545908 B1 19970730**; JP H0375384 A 19910329; KR 900018420 A 19901221; KR 940004103 B1 19940513

DOCDB simple family (application)

EP 93102764 A 19900507; JP 30256289 A 19891121; KR 900006497 A 19900508