Title (en)

PROCESS OF FABRICATING A METAL BAND HAVING A CHROMIUM AND CHROMIUM OXIDE COATING USING A TRIVALENT CHROMIUM CONTAINING ELECTROLYTE

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES MIT EINER BESCHICHTUNG AUS CHROM UND CHROMOXID BESCHICHTETEN METALLBANDS AUF BASIS EINER ELEKTROLYTLÖSUNG MIT EINER DREIWERTIGEN CHROMVERBINDUNG

Title (fr)

PROCÉDÉ DE FABRICATION D'UNE BANDE MÉTALLIQUE AYANT UN REVÊTEMENT DE CHROME ET D'OXYDE DE CHROME AVEC UN ÉLECTROLYTE À BASE DE CHROMIUM TRIVALENT

Publication

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Application

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Priority

DE 102018132075 A 20181213

Abstract (en)

[origin: CA3064669A1] The present invention relates to a method for the production of a metal strip (M) coated with a coating (B), said coating (B) containing chromium metal and chromium oxide and being electrolytically deposited from an electrolyte solution (E) that contains a trivalent chromium compound onto the metal strip (M) by bringing the metal strip (M), which is connected as the cathode, during an electrolysis time into contact with the electrolyte solution (E). An efficient deposition of a coating with a high proportion of chromium oxide is obtained by successively passing the metal strip (M) at a predefined strip travel speed (v) through a plurality of electrolysis tanks (1a, 1b, 1c; 1a bis 1h) arranged successively in a strip travel direction, wherein the electrolyte solution (E) in at least the last electrolysis tank (1 c; 1h), as viewed in the strip travel direction, or in a rear group of electrolysis tanks (1g, 1h) has a temperature, averaged across the volume of the electrolysis tank(s), of at most 40 °C, and the electrolysis time (tE), during which the metal strip (M) is in electrolytically effective contact with the electrolyte solution (E) in the last electrolysis tank (1c) or in the rear group of electrolysis tanks (1g, 1h) is less than 2.0 seconds.

IPC 8 full level

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CPC (source: BR CN EP KR US)

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