

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 DREIWERSTIGEN 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  
**EP 19206952 A 20191104**

Priority  
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Abstract (en)  
[origin: CA3063790A1] 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, into contact with the electrolyte solution (E). An effective deposition of the coating with a high chromium oxide portion is achieved by successively passing the metal strip (M) at a predefined strip travel speed (v) through a plurality of electrolysis tanks (1a to 1h) arranged successively in a strip travel direction, wherein the first electrolysis tank (1a), as viewed in the strip travel direction, or in a front group of electrolysis tanks (1a, 1b), is set to a low current density (j<sub>1</sub>); a second electrolysis tank (1c), which follows in the strip travel direction, or a middle group of electrolysis tanks (1c-1f), is set to a medium current density (j<sub>2</sub>); and a last electrolysis tank (1h), as viewed in the strip travel direction, or a rear group of electrolysis tanks (1g, 1h), is set to a high current density (j<sub>3</sub>), where  $j_1 \leq 12 < 13$  and the low current density (j<sub>1</sub>) is greater than 20 A/dm<sup>2</sup>.

IPC 8 full level  
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