

Title (en)

METHOD FOR MANUFACTURING CHROMIUM-CHROMIUM OXIDE COATED SUBSTRATES

Title (de)

VERFAHREN ZUR HERSTELLUNG VON CHROM-CHROMOXID BESCHICHTETEN SUBSTRATEN

Title (fr)

PROCÉDÉ DE FABRICATION DE SUBSTRATS REVÊTUS D'OXYDE CHROMIUM-CHROMIUM

Publication

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Application

EP 15726901 A 20150521

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Abstract (en)

[origin: WO2015177315A1] The present invention relates to a method for manufacturing a chromium metal - chromium oxide coated substrate by electrolytically depositing a plurality of chromium metal - chromium oxide coating layers on an electrically conductive substrate from an electrolyte solution that comprises a trivalent chromium compound and a chelating agent, wherein the electrolyte solution is free of chloride ions and of a boric acid buffering agent, wherein the electrically conductive substrate acts as a cathode, and wherein an anode comprising a catalytic coating of iridium oxide or a mixed metal oxide or a hydrogen gas diffusion anode is chosen for reducing or eliminating the oxidation of Cr(III)-ions to Cr(VI)-ions, wherein during the deposition of a chromium metal - chromium oxide layer hydrogen bubbles are formed at the strip surface, and wherein between the deposition of the chromium metal - chromium oxide layers, the hydrogen bubbles are removed from the surface of the strip.

IPC 8 full level

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Cited by

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