Title (en)

METHOD FOR ELECTRODEPOSITING A DARK CHROMIUM LAYER ON A SUBSTRATE AND SUBSTRATE HAVING AT LEAST ONE SIDE FULLY COVERED WITH A DARK CHROMIUM LAYER

Title (de)

VERFAHREN ZUM GALVANISCHEN ABSCHEIDEN EINER DUNKLEN CHROMSCHICHT AUF EINEM SUBSTRAT UND SUBSTRAT MIT MINDESTENS EINER VOLLSTÄNDIG MIT EINER DUNKLEN CHROMSCHICHT BEDECKTEN SEITE

Title (fr)

PROCÉDÉ DE DÉPÔT ÉLECTROLYTIQUE D'UNE COUCHE DE CHROME SOMBRE SUR UN SUBSTRAT ET SUBSTRAT AYANT AU MOINS UN CÔTÉ ENTIÈREMENT RECOUVERT D'UNE COUCHE DE CHROME SOMBRE

Publication

EP 4259854 A1 20231018 (EN)

Application

EP 21834798 A 20211210

Priority

- EP 20213572 A 20201211
- EP 20213575 A 20201211
- EP 2021085213 W 20211210

Abstract (en)

[origin: WO2022123019A1] The present invention relates to a method for electrodepositing a dark chromium layer on a substrate and a substrate having at least one side fully covered with a dark chromium layer. The method includes utilizing an aqueous trivalent chromium electroplating bath comprising colloidal particles and a step of treating the substrate with a rinse liquid having a temperature of 50 °C or more.

IPC 8 full level

C25D 3/06 (2006.01); **C25D 3/08** (2006.01); **C25D 5/00** (2006.01); **C25D 5/48** (2006.01); **C25D 5/50** (2006.01); **C25D 15/00** (2006.01)

CPC (source: EP US)

C25D 3/06 (2013.01 - EP US); **C25D 3/08** (2013.01 - EP US); **C25D 3/10** (2013.01 - EP US); **C25D 5/12** (2013.01 - US); **C25D 5/48** (2013.01 - EP); **C25D 5/50** (2013.01 - EP); **C25D 5/627** (2020.08 - EP US); **C25D 15/00** (2013.01 - EP US); **C25D 21/08** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2022123019 A1 20220616; CN 115803479 A 20230314; EP 4259854 A1 20231018; EP 4259855 A1 20231018; JP 2023531317 A 20230721; JP 2023553966 A 20231226; JP 3242417 U 20230615; JP 7467758 B2 20240415; TW 202231930 A 20220816; US 2023193496 A1 20230622; US 2024011178 A1 20240111; WO 2022123023 A1 20220616

DOCDB simple family (application)

EP 2021085213 W 20211210; CN 202180048786 A 20211210; EP 2021085219 W 20211210; EP 21834798 A 20211210; EP 21834800 A 20211210; JP 2023000502 U 20230220; JP 2023501840 A 20211210; JP 2023535571 A 20211210; TW 110146220 A 20211210; US 202118000221 A 20211210; US 202118256691 A 20211210