

Title (en)

A HYDROGEN EMBRITTLEMENT RESISTANCE COATED STEEL

Title (de)

WASSERSTOFFVERSÖDUNGSBESTÄNDIGER BESCHICHTETER STAHL

Title (fr)

ACIER REVÊTU PRÉSENTANT DE LA RÉSISTANCE À LA FRAGILISATION PAR L'HYDROGÈNE

Publication

EP 4263915 A1 20231025 (EN)

Application

EP 20828352 A 20201217

Priority

IB 2020062078 W 20201217

Abstract (en)

[origin: WO2022129997A1] A method of production of a coated steel substrate comprising of the steps to have a steel substrate; performing electroplating of the steel substrate with an electroplating solution having a pH of from 2 to 6 and containing 100g/l to 500g/l of NiSO₄ and 1 g/l to 15g/l of MoS₂, by applying a current density from 15 A/dm² to 45 A/dm² during 30 seconds to 300 seconds to generate a layer of Ni-MoS₂ coating; thereafter, rinsing the steel substrate and drying it to obtain a coated steel substrate.

IPC 8 full level

C25D 3/12 (2006.01); **C21D 8/02** (2006.01); **C22C 38/00** (2006.01); **C25D 15/00** (2006.01)

CPC (source: EP KR US)

C21D 1/19 (2013.01 - EP KR); **C21D 1/26** (2013.01 - EP KR); **C21D 6/002** (2013.01 - US); **C21D 6/005** (2013.01 - US); **C21D 6/008** (2013.01 - US); **C21D 8/0205** (2013.01 - US); **C21D 8/0226** (2013.01 - EP KR US); **C21D 8/0236** (2013.01 - EP KR US); **C21D 8/0263** (2013.01 - EP KR US); **C21D 8/0273** (2013.01 - EP KR); **C21D 8/0278** (2013.01 - US); **C21D 9/46** (2013.01 - EP KR US); **C22C 38/001** (2013.01 - US); **C22C 38/002** (2013.01 - US); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/26** (2013.01 - EP KR US); **C22C 38/28** (2013.01 - EP KR US); **C22C 38/32** (2013.01 - US); **C25D 3/12** (2013.01 - EP KR US); **C25D 3/562** (2013.01 - KR); **C25D 5/48** (2013.01 - KR); **C25D 7/0614** (2013.01 - KR); **C25D 15/00** (2013.01 - EP KR)

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 2022129997 A1 20220623; CA 3202210 A1 20220623; CN 116529398 A 20230801; EP 4263915 A1 20231025; JP 2024502734 A 20240123; KR 20230107855 A 20230718; MX 2023007041 A 20230623; US 2024102121 A1 20240328; ZA 202305298 B 20240626

DOCDB simple family (application)

IB 2020062078 W 20201217; CA 3202210 A 20201217; CN 202080107931 A 20201217; EP 20828352 A 20201217; JP 2023536936 A 20201217; KR 20237020224 A 20201217; MX 2023007041 A 20201217; US 202018267398 A 20201217; ZA 202305298 A 20230515