

Title (en)
METHOD FOR MODIFYING FINISHED SURFACES WITH THE AIM OF IMPROVED SURFACE PROPERTIES

Title (de)
VERFAHREN ZUR MODIFIKATION VON VEREDELTEN OBERFLÄCHEN MIT DEM ZIEL VERBESSERTER OBERFLÄCHENEIGENSCHAFTEN

Title (fr)
PROCÉDÉ DE MODIFICATION DE SURFACES FINIES EN VUE D'AMÉLIORER DES PROPRIÉTÉS DE SURFACE

Publication
EP 4301883 A1 20240110 (DE)

Application
EP 22709671 A 20220225

Priority

- DE 102021105207 A 20210304
- EP 2022054760 W 20220225

Abstract (en)
[origin: WO2022184565A1] The invention relates to a method for producing a semi-finished product with a modified surface, comprising at least one method step of modifying, at least in regions, the surface of a coated, skin-passed, oiled, cleaned metal steel substrate by means of low-pressure or atmospheric-pressure plasma treatment of said surface regions with oxygen, argon or a mixture of oxygen and argon as a process gas. The invention further relates to the semi-finished products and/or flat steel products produced in this way, optionally shaped semi-finished products and/or flat steel products, and the production thereof.

IPC 8 full level
C21D 1/74 (2006.01); **C21D 8/02** (2006.01); **C21D 9/56** (2006.01); **C23C 2/06** (2006.01); **C23C 2/26** (2006.01); **C23C 2/28** (2006.01); **C23C 2/40** (2006.01); **C25D 5/48** (2006.01); **C25D 7/06** (2006.01)

CPC (source: EP US)
C21D 1/74 (2013.01 - EP); **C21D 7/02** (2013.01 - US); **C21D 8/0242** (2013.01 - EP); **C21D 8/0257** (2013.01 - EP); **C21D 8/0278** (2013.01 - EP); **C21D 9/561** (2013.01 - EP); **C21D 9/562** (2013.01 - EP); **C21D 10/00** (2013.01 - US); **C23C 2/06** (2013.01 - EP US); **C23C 2/26** (2013.01 - EP); **C23C 2/28** (2013.01 - US); **C23C 2/285** (2013.01 - EP); **C23C 2/40** (2013.01 - EP US); **C25D 3/22** (2013.01 - US); **C25D 5/48** (2013.01 - US); **C25D 7/0614** (2013.01 - US); **C25D 13/16** (2013.01 - EP)

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)
DE 102021105207 A1 20220908; CN 117295829 A 20231226; EP 4301883 A1 20240110; US 2024191320 A1 20240613; WO 2022184565 A1 20220909

DOCDB simple family (application)
DE 102021105207 A 20210304; CN 202280018924 A 20220225; EP 2022054760 W 20220225; EP 22709671 A 20220225; US 202218279404 A 20220225