

Title (en)

METHOD FOR CLEANING A SURFACE OF A STEEL PRODUCT

Title (de)

VERFAHREN ZUM REINIGEN EINER OBERFLÄCHE EINES STAHLPRODUKTS

Title (fr)

PROCÉDÉ DE NETTOYAGE D'UNE SURFACE D'UN PRODUIT EN ACIER

Publication

EP 2782688 A1 20141001 (DE)

Application

EP 12788555 A 20121122

Priority

- DE 102011119334 A 20111125
- EP 2012073332 W 20121122

Abstract (en)

[origin: WO2013076187A1] The invention relates to a method and to a device for cleaning a surface of a steel product (3). In the method, a liquid jet (S1) is directed at the surface (2) from a nozzle (6), which is located at a position associated with an edge (11) of the surface (2) to be cleaned, relative motion occurs between the nozzle (6) and the steel product (3) during the cleaning process, and the liquid jet (S1) is oriented perpendicular to the direction (R) of the relative motion of the steel product (3) and the nozzle (6). According to the invention, in order in particular to minimize the danger of cracks forming on the edges of the steel product to be cleaned, an additional liquid jet (S2) oriented perpendicular to the direction (R) of the relative motion between the nozzles (6, 7) and the steel product (3) is directed at the surface (2) from an additional nozzle (7) without intersecting with the first liquid jet (S1), said additional nozzle being located at a position associated with the edge (12) of the surface (2) that is opposite the edge (6) of the steel product (3) associated with the first nozzle (6), wherein the incidence region (AB1, AB2) of the liquid jets (S1, S2) is at a distance from the edge (11, 12) associated with the nozzle (6, 7) that outputs the liquid jet (S1, S2).

IPC 8 full level

B21B 45/08 (2006.01)

CPC (source: EP US)

B08B 3/04 (2013.01 - US); **B21B 45/0275** (2013.01 - EP US); **B21B 45/08** (2013.01 - EP US)

Citation (search report)

See references of WO 2013076187A1

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

DOCDB simple family (publication)

DE 102011119334 A1 20130529; CN 104066524 A 20140924; CN 104066524 B 20160824; EP 2782688 A1 20141001; EP 2782688 B1 20150916; ES 2556038 T3 20160112; US 2014290704 A1 20141002; WO 2013076187 A1 20130530

DOCDB simple family (application)

DE 102011119334 A 20111125; CN 201280057619 A 20121122; EP 12788555 A 20121122; EP 2012073332 W 20121122; ES 12788555 T 20121122; US 201214360422 A 20121122