

Title (en)

METHOD FOR CLEANING AND/OR DESCALING A SLAB OR A PRELIMINARY STRIP BY MEANS OF A DESCALING DEVICE, AND
DESCALING DEVICE

Title (de)

VERFAHREN ZUR REINIGUNG UND/ODER ENTZUNDERUNG EINER BRAMME ODER EINES VORBANDES MITTELS EINES
ZUNDERWÄSCHERS UND ZUNDERWÄSCHER

Title (fr)

PROCEDE POUR NETTOYER ET/OU DECALAMINER UNE BRAME OU UN PREFEUILLARD AU MOYEN D'UN LAVEUR DE CALAMINE ET
LAVEUR DE CALAMINE

Publication

EP 2882542 B2 20210310 (DE)

Application

EP 13747662 A 20130807

Priority

- DE 102012214298 A 20120810
- EP 2013066517 W 20130807

Abstract (en)

[origin: WO2014023753A1] The invention relates to a method for cleaning and/or descaling a slab or a preliminary strip (1) by means of a descaling device (2), wherein the descaling device (2) has at least one nozzle (3), through which water under pressure (p) is discharged onto the surface of the slab or of the preliminary strip (1). In the method according to the invention, in order to achieve a good descaling result in an energy-saving manner, the outlet (4) of the nozzle (3) is rectangular, or is slit-shaped and has an arcuate course at least in some sections, in a direction normal (N) to the surface of the slab or of the preliminary strip (1), such that the water is discharged as a continuously strip-shaped jet (5) across the entire width (B) of the slab or of the preliminary strip (1), wherein the width (b) of the outlet (4) of the nozzle (3) in a conveying direction (F) of the slab or of the preliminary strip (1) is selected between 0.2 mm and 1.5 mm, wherein the water is fed to the nozzle (3) at a pressure between 5 bar and 50 bar and wherein the distance (a) between the outlet (4) of the nozzle (3) and the surface of the slab or of the preliminary strip (1) is selected between 8 mm and 50 mm. The invention further relates to a descaling device.

IPC 8 full level

B21B 45/02 (2006.01); **B21B 45/08** (2006.01)

CPC (source: EP KR RU US)

B08B 3/041 (2013.01 - KR US); **B21B 45/0233** (2013.01 - EP KR US); **B21B 45/0278** (2013.01 - KR); **B21B 45/0287** (2013.01 - EP KR US); **B21B 45/04** (2013.01 - KR); **B21B 45/08** (2013.01 - EP KR RU US); **B21B 45/0278** (2013.01 - EP US); **B21B 45/04** (2013.01 - EP US)

Citation (opposition)

Opponent :

- DE 19938705 A1 20010215 - SMS DEMAG AG [DE]
- US 2011146706 A1 20110623 - LEBLANC VALÉRIE [FR], et al
- DE 69201173 T2 19950831 - CENTRE RECH METALLURGIQUE [BE]

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)

WO 2014023753 A1 20140213; BR 112015002825 A2 20170808; CN 104703721 A 20150610; CN 104703721 B 20160817; DE 102012214298 A1 20140213; EP 2882542 A1 20150617; EP 2882542 B1 20160330; EP 2882542 B2 20210310; JP 2015530250 A 20151015; JP 5882543 B2 20160309; KR 101650819 B1 20160824; KR 20150031342 A 20150323; MY 176374 A 20200804; RU 2015107797 A 20160927; RU 2608939 C2 20170126; UA 111674 C2 20160525; US 2015217336 A1 20150806

DOCDB simple family (application)

EP 2013066517 W 20130807; BR 112015002825 A 20130807; CN 201380053275 A 20130807; DE 102012214298 A 20120810; EP 13747662 A 20130807; JP 2015525870 A 20130807; KR 20157004683 A 20130807; MY PI2015700394 A 20130807; RU 2015107797 A 20130807; UA A201502062 A 20130807; US 201314420862 A 20130807