

Title (en)
COOLED STRAND GUIDE ROLLER

Title (de)
GEKÜHLTE STRANGFÜHRUNGSROLLE

Title (fr)
ROULEAU DE GUIDAGE DE BARRES REFROIDI

Publication
EP 3024611 A2 20160601 (DE)

Application
EP 14747330 A 20140722

Priority

- AT 5902013 A 20130724
- EP 2014065741 W 20140722

Abstract (en)
[origin: WO2015011149A2] The invention relates to a strand guide roller (30) for guiding a steel strand in a strand casting machine and to a method for cooling the strand guide roller (30) using a coolant. The aim of the invention is to provide a particularly robust cooled strand guide roller (30). This is achieved by a strand guide roller (30) having - a left (10a) and a right bearing block (10b); - a stationary axle (11), said stationary axle (11) being connected to the left (10a) and to the right bearing block (10b) in a torsionally rigid manner; - a cylindrical roller casing (12) and a left (13a) and a right bearing (13b), said roller casing (12) being supported by the left and right bearing (13a, 13b) in a rotatable manner relative to the stationary axle (11); and - a water conducting casing (1), wherein the water conducting casing (1) can conduct cooling water from a left cavity (14a) between the axle (11) and the water conducting casing (1) in the region of the left bearing (13a) into a longitudinal space (16) between the water conducting casing (1) and the roller casing (12), along the longitudinal space (16) in an axial (x) and a tangential direction (t), and from the longitudinal space (16) into a right cavity (14b) between the water conducting casing (1) and the axle (11) in the region of the right bearing (13b).

IPC 8 full level
B22D 11/128 (2006.01)

CPC (source: AT EP RU)
B21B 1/46 (2013.01 - AT); **B22D 11/0682** (2013.01 - AT); **B22D 11/1287** (2013.01 - AT EP); **B21B 2027/083** (2013.01 - AT); **B22D 11/128** (2013.01 - RU)

Citation (search report)
See references of WO 2015011149A2

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

DOCDB simple family (publication)
WO 2015011149 A2 20150129; WO 2015011149 A3 20150409; AT 514625 A1 20150215; AT 514625 B1 20180715; CN 105592958 A 20160518; CN 105592958 B 20170929; EP 3024611 A2 20160601; EP 3024611 B1 20170830; EP 3024611 B2 20200506; ES 2650315 T3 20180117; KR 101701313 B1 20170201; KR 20160037191 A 20160405; RU 2016105761 A 20170829; RU 2633166 C2 20171011; UA 114853 C2 20170810

DOCDB simple family (application)
EP 2014065741 W 20140722; AT 5902013 A 20130724; CN 201480042042 A 20140722; EP 14747330 A 20140722; ES 14747330 T 20140722; KR 20167004684 A 20140722; RU 2016105761 A 20140722; UA A201600476 A 20140722