

Title (en)

REFRACTORY CASTING TUBE FOR A MOULD FOR CONTINUOUSLY CASTING MOLTEN METAL

Title (de)

FEUERFESTES GIESSROHR FÜR EINE KOKILLE ZUM STRANGGIESSEN VON METALLSCHMELZE

Title (fr)

BUSSETTE DE COULÉE RÉFRACTAIRE POUR UNE LINGOTIÈRE SERVANT À LA COULÉE CONTINUE DE MÉTAL EN FUSION

Publication

EP 2841222 A2 20150304 (DE)

Application

EP 13723440 A 20130426

Priority

- EP 12002962 A 20120426
- EP 2013058815 W 20130426
- EP 13723440 A 20130426

Abstract (en)

[origin: EP2656945A1] The refractory casting tube (2) comprises a tubular top part (3) and an immersible, flattened bottom part (5) dipped into a molten metal in an inner mould space (6) during the casting. A refractory deflection element is integrated in a funnel-shaped or similarly shaped inlet (4) of the top part, and is shaped such that a fluid-dynamic dissipation is generated on the molten metal during casting in the inlet. The casting tube is directly supported to a mold (1) in its top part. The inlet is formed in a form of a cone, a pot or other shape. The space of the inlet is totally or partly flattened. The refractory casting tube (2) comprises a tubular top part (3) and an immersible, flattened bottom part (5) dipped into a molten metal in an inner mould space (6) during the casting. A refractory deflection element is integrated in a funnel-shaped or similarly shaped inlet (4) of the top part, and is shaped such that a fluid-dynamic dissipation is generated on the molten metal during casting in the inlet. The casting tube is directly supported to a mold in its top part. The inlet is formed in a shape of a cone, a pot or other shape. The inner space of the inlet is totally or partly flattened. The inlet includes an insert body with a support flange and a closed-end projection having an outlet. The bottom part of the tube has a length that is 1/3 of mold length, is continuously formed in a tubular shape, and comprises side longitudinal slots in its bottom portion. An independent claim is included for a refractory cover plate.

IPC 8 full level

B22D 11/10 (2006.01); **B22D 11/103** (2006.01); **B22D 41/50** (2006.01); **B22D 41/56** (2006.01)

CPC (source: CN EP US)

B22D 11/10 (2013.01 - CN EP US); **B22D 11/103** (2013.01 - CN EP US); **B22D 11/106** (2013.01 - US); **B22D 41/50** (2013.01 - CN EP US); **B22D 41/507** (2013.01 - EP US); **B22D 41/56** (2013.01 - CN EP US); **F16M 11/32** (2013.01 - US)

Citation (search report)

See references of WO 2013160476A2

Citation (examination)

- GB 2160457 A 19851224 - STOPINC AG
- CN 2576379 Y 20031001 - BIAN RENJIE [CN]
- EP 0577909 A1 19940112 - FLOCON ITALIANA [IT]
- EP 2368655 A1 20110928 - VESUVIUS GROUP SA [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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2656945 A1 20131030; BR 112014026646 A2 20170718; CN 104411427 A 20150311; EP 2841222 A2 20150304; KR 20150006851 A 20150119; RU 2014145902 A 20160610; US 2015136917 A1 20150521; WO 2013160476 A2 20131031; WO 2013160476 A3 20140530

DOCDB simple family (application)

EP 12002962 A 20120426; BR 112014026646 A 20130426; CN 201380022104 A 20130426; EP 13723440 A 20130426; EP 2013058815 W 20130426; KR 20147032077 A 20130426; RU 2014145902 A 20130426; US 201314396432 A 20130426