

Title (en)

CASTING PIPE, DEVICE FOR HANDLING SAID PIPE AND VALVE DRIVING DEVICE

Title (de)

GIESSROHR, VORRICHTUNG ZUR HANDHABUNG DES ROHRS UND VENTILANSTEUERVORRICHTUNG

Title (fr)

TUBE DE COULEE, DISPOSITIF DE MANIPULATION DE CE TUBE ET DISPOSITIF D'ENTRAINEMENT D'UNE VALVE

Publication

**EP 2367651 B1 20130102 (FR)**

Application

**EP 09763841 A 20091119**

Priority

- EP 2009008244 W 20091119
- EP 08169518 A 20081120
- EP 09008451 A 20090629
- EP 09763841 A 20091119

Abstract (en)

[origin: WO2010057640A1] The invention relates to a device (26, 26', 26'') for handling a jet protection pipe (16) for casting liquid metal, that includes means (28, 30, 30') for maintaining said pipe downstream from a metal casting regulation valve (14), wherein the valve can assume an open configuration and a closed configuration under the action of driving means (20). The handling device (26, 26', 26'') includes means (32, 34, 80) for attachment to the valve driving means (20). The present invention also relates to a jet protection pipe or a flow of liquid metal from a casting ladle towards a metal distributor, the pipe having a longitudinal axis and comprising a pipe gripping head at one end thereof. According to the invention, the gripping head is fusiform.

IPC 8 full level

**B22D 41/56** (2006.01); **B22D 11/106** (2006.01); **B22D 41/50** (2006.01)

CPC (source: EP KR US)

**B22D 11/106** (2013.01 - EP KR US); **B22D 41/50** (2013.01 - EP KR US); **B22D 41/56** (2013.01 - KR)

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

RS

DOCDB simple family (publication)

**WO 2010057640 A1 20100527**; AU 2009317593 A1 20110707; AU 2009317593 B2 20140508; BR PI0922101 A2 20160210; BR PI0922101 B1 20170328; CA 2743091 A1 20100527; CN 102281972 A 20111214; CN 102281972 B 20141224; DK 2367651 T3 20130402; EP 2367651 A1 20110928; EP 2367651 B1 20130102; ES 2402083 T3 20130426; JP 2012509186 A 20120419; JP 5405583 B2 20140205; KR 101678705 B1 20161123; KR 20110095382 A 20110824; MX 2011005337 A 20110616; MY 156901 A 20160415; NZ 593480 A 20130222; PL 2367651 T3 20130531; PT 2367651 E 20130404; RS 52687 B 20130830; RU 2011124592 A 20121227; RU 2511162 C2 20140410; SI 2367651 T1 20130329; US 2011278331 A1 20111117; US 8926893 B2 20150106; ZA 201104535 B 20120926

DOCDB simple family (application)

**EP 2009008244 W 20091119**; AU 2009317593 A 20091119; BR PI0922101 A 20091119; CA 2743091 A 20091119; CN 200980155160 A 20091119; DK 09763841 T 20091119; EP 09763841 A 20091119; ES 09763841 T 20091119; JP 2011536776 A 20091119; KR 20117014170 A 20091119; MX 2011005337 A 20091119; MY PI20112112 A 20091119; NZ 59348009 A 20091119; PL 09763841 T 20091119; PT 09763841 T 20091119; RS P20130084 A 20091119; RU 2011124592 A 20091119; SI 200930491 T 20091119; US 200913130460 A 20091119; ZA 201104535 A 20110620