

Title (en)

Apparatus for dispensing molten metal and method of manufacturing such an apparatus

Title (de)

Vorrichtung zur Ausgabe von Schmelzmetall und Verfahren zur Herstellung einer derartigen Vorrichtung

Title (fr)

Appareil de distribution de métal fondu et procédé de fabrication d'un tel appareil

Publication

**EP 2011591 B1 20120201 (EN)**

Application

**EP 08159059 A 20080626**

Priority

FI 20070533 A 20070706

Abstract (en)

[origin: EP2011591A2] The invention relates to a closing mechanism (1) for dispensing molten metal from a hole-bottomed ladle, said closing mechanism containing three at least partially superimposed ceramic plates (2, 3, 4), each of said plates (2, 3, 4) being provided with a hole (5), said three ceramic plates (2, 3, 4) being cast in a ceramic mass (7), said mass (7) being present on at least two sides of the ceramic plates (2, 3, 4), and the ceramic plates (2, 3, 4), the ceramic mass (7), and a metal shell (10), used as a casting mold, establishing together an integrated unit.

IPC 8 full level

**B22D 41/22** (2006.01); **B22D 41/24** (2006.01); **B22D 41/30** (2006.01); **B22D 41/40** (2006.01)

CPC (source: EP FI US)

**B22D 41/22** (2013.01 - EP FI US); **B22D 41/24** (2013.01 - EP US); **B22D 41/30** (2013.01 - EP US); **B22D 41/40** (2013.01 - EP US)

Cited by

US8366990B2

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 MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

**EP 2011591 A2 20090107**; **EP 2011591 A3 20090211**; **EP 2011591 B1 20120201**; AT E543593 T1 20120215; CN 101337272 A 20090107; CN 101337272 B 20120613; ES 2386059 T3 20120808; FI 120385 B 20091015; FI 20070533 A0 20070706; FI 20070533 A 20090107; JP 2009012077 A 20090122; JP 5440829 B2 20140312; RU 2008126194 A 20100110; RU 2467828 C2 20121127; US 2009008056 A1 20090108

DOCDB simple family (application)

**EP 08159059 A 20080626**; AT 08159059 T 20080626; CN 200810135601 A 20080707; ES 08159059 T 20080626; FI 20070533 A 20070706; JP 2008175787 A 20080704; RU 2008126194 A 20080630; US 16779908 A 20080703