

Title (en)

Method and device for continuous casting of steel

Title (de)

Vorrichtung und Verfahren zum Stranggießen von Stahl

Title (fr)

Dispositif et procédé destinés au moulage en continu d'acier

Publication

EP 2055411 A1 20090506 (DE)

Application

EP 07021428 A 20071102

Priority

EP 07021428 A 20071102

Abstract (en)

An assembly for the continuous casting of free cutting steel has a distributor (2) with an outlet (4), an ingot mould and a submerged tube (5) with an outlet to the ingot mould. The assembly has an additive injector (8) to the liquid steel in the tube (5) or outlet (4). Also claimed is a commensurate process in which an injector discharges solid or granular additives. The additives are expelled by inert gas e.g. Ar and/or N2 pressure at 20 to 50 mbar through a Laval jet at 7 to 13 m/s. The granule diameter is in the range 0.5 to 1 mm and incorporate materials from the periodic table: Pb, S, Ti, Ca, Zr, Ce, Bi, B, Te, Be, Se and P. The rate at which the additive is expelled is adjustable to vary the concentration within liquid steel.

Abstract (de)

Gegenstand der Erfindung ist eine Vorrichtung und ein Verfahren zum Stranggießen von Stahl, bei der bzw. bei dem Zuschlagsstoffe mittels einer Injektorvorrichtung in den durch den Ausguss oder das Tauchrohr fließenden Stahlstrahl gegeben werden.

IPC 8 full level

B22D 11/10 (2006.01); **B22D 11/108** (2006.01)

CPC (source: EP)

B22D 11/108 (2013.01); **B22D 41/58** (2013.01)

Citation (search report)

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CN107636807A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

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