

Title (en)

INJECTION TIP FOR CASTING MACHINE, CASTING MACHINE AND METHOD USING SUCH A TIP

Title (de)

INJEKTIONSSPITZE FÜR EINE GIESSMASCHINE, GIESSMASCHINE UND VERFAHREN MIT DIESER SPITZE

Title (fr)

EMBOUT D'INJECTION POUR MACHINE DE COULÉE, MACHINE ET PROCÉDÉ DE COULÉE FAISANT USAGE D'UN TEL EMBOUT

Publication

**EP 3386659 A1 20181017 (FR)**

Application

**EP 16808684 A 20161209**

Priority

- FR 1562245 A 20151211
- EP 2016080396 W 20161209

Abstract (en)

[origin: WO2017097961A1] The invention concerns an injection tip (20) for injecting liquid metal under pressure, suitable for being inserted between a liquid metal supply conduit (12) and an injection opening (33) of a mould (30), characterised in that it is tubular in shape, made from electrically insulating refractory material and in that it comprises a channel (22) suitable for the flow of liquid metal between a first end referred to as the upstream end (23), suitable for being connected to said conduit, and a second end, referred to as the downstream end (24), suitable for being connected to the mould, and an electromagnetic coil (26), positioned between said ends, the axis of which merges with at least a portion of the axis of the channel. The invention also concerns a casting machine using such a tip and a method for casting metal using said machine.

IPC 8 full level

**B22D 17/04** (2006.01); **B22D 17/20** (2006.01); **B22D 17/30** (2006.01)

CPC (source: EP US)

**B22D 17/04** (2013.01 - EP US); **B22D 17/2023** (2013.01 - EP US); **B22D 17/2038** (2013.01 - EP US); **B22D 17/30** (2013.01 - EP US); **B22D 17/02** (2013.01 - EP US)

Citation (search report)

See references of WO 2017097961A1

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 2017097961 A1 20170615**; CN 108367344 A 20180803; EP 3386659 A1 20181017; EP 3386659 B1 20201202; FR 3044943 A1 20170616; FR 3044943 B1 20201204; JP 2018537296 A 20181220; JP 6840166 B2 20210310; US 2019001407 A1 20190103

DOCDB simple family (application)

**EP 2016080396 W 20161209**; CN 201680072521 A 20161209; EP 16808684 A 20161209; FR 1562245 A 20151211; JP 2018549611 A 20161209; US 201616060341 A 20161209