

Title (en)
Negative pressure updraught pouring method

Title (de)
Negatives Unterdruckaufströmungsausgießverfahren

Title (fr)
Procédé de versement ascendant de pression négative

Publication
EP 3059029 A1 20160824 (EN)

Application
EP 15155388 A 20150217

Priority
EP 15155388 A 20150217

Abstract (en)
A negative pressure updraught pouring method is provided, wherein a melting furnace is filled with molten steel and a flat plate with a suction pipe is covered on a top end of the melting furnace with the bottom end of the suction pipe is dipped into the molten steel; a ventilated mold is placed on the flat plate such that a flow path system of the mold is connected with a top end of the suction pipe; and a chamber is covered on the mold and the flat plate, and the air inside the chamber is drawn out to reduce the air pressure inside the chamber and a cavity of the mold, thereby the molten steel inside the melting furnace is sucked into the mold cavity through the suction pipe and the flow path system by the negative pressure formed inside the chamber for forming a cast.

IPC 8 full level
B22D 18/06 (2006.01)

CPC (source: EP)
B22C 9/02 (2013.01); **B22D 18/06** (2013.01)

Citation (search report)

- [X] DE 3925373 A1 19900215 - TEGNEMO NILS LAGE INGEMAR [SE]
- [X] EP 0580136 A1 19940126 - TOYOTA MOTOR CO LTD [JP]
- [X] US 1473246 A 19231106 - LEON MONTUPET
- [X] EP 0967035 A1 19991229 - CENTRAL MOTOR WHEEL CO LTD [JP]
- [X] US 4550763 A 19851105 - NIKOLOV IVAN D [BG]
- [X] FR 571370 A 19240516

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 3059029 A1 20160824; EP 3059029 B1 20180613; HU E039983 T2 20190228; PL 3059029 T3 20181130; RS 57721 B1 20181231;
TR 201812291 T4 20180921

DOCDB simple family (application)
EP 15155388 A 20150217; HU E15155388 A 20150217; PL 15155388 T 20150217; RS P20181003 A 20150217; TR 201812291 T 20150217