

Title (en)  
MACHINE FOR MELTING AND INJECTING METAL MATERIAL INTO A MOLD FOR MANUFACTURING LOST WAX CASTING OBJECTS AND  
RELATIVE METHOD

Title (de)  
MASCHINE ZUM SCHMELZEN UND EINSPRITZEN VON METALLISCHEM MATERIAL IN EINE FORM ZUM HERSTELLEN VON  
WACHSAUSSCHMELZENDEN GUSSGEGENSTÄNDEN UND ZUGEHÖRIGES VERFAHREN

Title (fr)  
MACHINE POUR LA FUSION ET L'INJECTION D'UN MATÉRIAU MÉTALLIQUE DANS UN MOULE EN VUE DE LA FABRICATION D'OBJETS DE  
COULÉE À CIRE PERDUE ET PROCÉDÉ ASSOCIÉ

Publication  
**EP 4076786 B1 20231025 (EN)**

Application  
**EP 19856420 A 20191216**

Priority  
IT 2019000117 W 20191216

Abstract (en)  
[origin: WO2021124360A1] A machine (100) for melting and injecting metal material into a mold (14) for manufacturing lost wax casting objects, comprising: a controller (1); a melting chamber, operationally connected to the controller (1), comprising a crucible (5) adapted to contain metal material, the crucible (5) comprising at least one dispensing hole for the molten metal material, the melting chamber further comprising an induction generator (41), operationally connected to the controller (1), the induction generator (41) being adapted to melt, controlled by the controller (1), the metal material inside the crucible (5) of the melting chamber at a set melting temperature, the controller (1) being configured to adjust the dispensing of the molten metal material from said at least one dispensing hole of the crucible (5) of the melting chamber; an injection chamber (12) operationally connected to the controller (1), adapted to receive the molten metal material which can be dispensed from the melting chamber into an injection point (13) associated with a mold (14) of objects that can be manufactured by lost wax casting, which can be housed in the injection chamber (12). The injection chamber (12) comprises a support (18) configured to house one or more molds (14) of objects that can be manufactured by lost wax casting, each one associated with one or more injection points defining a plurality of injection points (13), said support (18) being adapted to rotate about a respective rotation axis (Al). The controller (1), for each injection point of the plurality of injection points (13), is configured to: actuate the rotation of the support (18) of said one or more molds (14) of objects about said rotation axis (Al) to position in succession an injection point of said plurality of injection points (13) coaxially with said at least one dispensing hole of the crucible (5) of the melting chamber; block the rotation of said support (18); enable the dispensing of the molten metal material from the crucible (5) of the melting chamber to the said injection chamber (12).

IPC 8 full level  
**B22C 9/04** (2006.01); **B22C 7/02** (2006.01); **B22C 9/02** (2006.01); **B22C 9/08** (2006.01); **B22D 25/02** (2006.01); **B22D 39/02** (2006.01); **B22D 41/01** (2006.01); **B22D 41/08** (2006.01); **B22D 41/18** (2006.01); **B22D 41/20** (2006.01); **B22D 41/50** (2006.01); **B22D 47/00** (2006.01)

CPC (source: EP)  
**B22C 7/02** (2013.01); **B22C 9/02** (2013.01); **B22C 9/04** (2013.01); **B22C 9/082** (2013.01); **B22D 25/026** (2013.01); **B22D 39/023** (2013.01); **B22D 41/01** (2013.01); **B22D 41/08** (2013.01); **B22D 41/18** (2013.01); **B22D 41/20** (2013.01); **B22D 41/50** (2013.01); **B22D 47/00** (2013.01)

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

DOCDB simple family (publication)  
**WO 2021124360 A1 20210624**; EP 4076786 A1 20221026; EP 4076786 B1 20231025

DOCDB simple family (application)  
**IT 2019000117 W 20191216**; EP 19856420 A 20191216