

Title (en)

METHOD AND APPARATUS FOR CASTING METALS UNDER PRESSURE USING A COLD CHAMBER

Title (de)

VERFAHREN UND VORRICHTUNG ZUM VERGIESSEN VON METALLEN UNTER DRUCK IM KALTKAMMER

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR COULER DES MÉTAUX SOUS PRESSION DANS UNE CHAMBRE FROIDE

Publication

**EP 3613520 B1 20210929 (DE)**

Application

**EP 18189842 A 20180821**

Priority

EP 18189842 A 20180821

Abstract (en)

[origin: JP2020028918A] To provide a device and method capable of reducing energy consumption and casting a lesser number of lots of alloy, alloying in a larger variety, and also improving the quality of component members, in the cold chamber method. SOLUTION: A method and device 1 includes: a step of charging a billet consisting of a metal to cast into one of at least two injection chambers 2; a step of replacement by supplying the one injection chamber into a die-casting machine 10, in which the injection chambers have respective ones of outlet ports and supply and exchange of the injection chambers are alternately performed based on at least two existing injection chambers; and a step of heating a billet by induction. For charge into a cavity, melting of a billet within the injection chamber is completely performed after the supply of the injection chamber into the die-casting machine and replacement thereof but before opening of the outlet port of the injection chamber. SELECTED DRAWING: Figure 3

IPC 8 full level

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

CPC (source: CN EP US)

**B22D 17/007** (2013.01 - US); **B22D 17/04** (2013.01 - EP); **B22D 17/08** (2013.01 - CN US); **B22D 17/20** (2013.01 - CN US);  
**B22D 17/203** (2013.01 - US); **B22D 17/2038** (2013.01 - EP); **B22D 17/2053** (2013.01 - EP)

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)

**EP 3613520 A1 20200226; EP 3613520 B1 20210929;** CN 110842170 A 20200228; CN 110842170 B 20230221; JP 2020028918 A 20200227;  
US 11040394 B2 20210622; US 2020061698 A1 20200227

DOCDB simple family (application)

**EP 18189842 A 20180821;** CN 201910774807 A 20190821; JP 2019150210 A 20190820; US 201916544951 A 20190820