

Title (en)  
CASTING MOLD, COUNTER-PRESSURE CASTING METHOD AND LOW-PRESSURE CASTING METHOD

Title (de)  
GIESSFORM, GEGENDRUCKGIESSVERFAHREN UND NIEDERDRUCKGIESSVERFAHREN

Title (fr)  
MOULE DE COULÉE, PROCÉDÉ DE COULÉE CONTRE GRAVITÉ ET PROCÉDÉ DE COULÉE À BASSE PRESSION

Publication  
**EP 3960330 A1 20220302 (EN)**

Application  
**EP 21191812 A 20210817**

Priority  
CN 202010893570 A 20200831

Abstract (en)  
The application relates to the technical field of casting and provides a casting mold, a counter-pressure casting method and a low-pressure casting method. The casting mold includes an upper mold insert arranged on an upper mold, a riser cavity is formed in a lower part of the upper mold insert, the riser cavity communicates with a mold cavity, an air pipe communicating with the riser cavity is arranged on the upper mold insert, one end of the air pipe is located at a top of the riser cavity, and compressed air can be introduced. The compressed air is introduced into the air pipe in the casting process, an upper part of the riser cavity forms a pressure with the same order of magnitude in a heat-insulating furnace, and the pressure of the riser is transmitted to a far-end defect position through local extrusion, thereby achieving the purpose of feeding the defect position to eliminate the defect.

IPC 8 full level  
**B22D 18/04** (2006.01); **B22D 18/06** (2006.01)

CPC (source: CN EP KR US)  
**B22D 17/145** (2013.01 - US); **B22D 18/04** (2013.01 - CN EP KR US); **B22D 18/06** (2013.01 - EP); **B22D 18/08** (2013.01 - EP); **B22D 19/10** (2013.01 - KR); **B22D 21/007** (2013.01 - KR); **B22D 27/13** (2013.01 - US)

Citation (search report)  
• [I] US 2009321036 A1 20091231 - OHNAKA ITSUO [JP]  
• [I] EP 0634240 A1 19950118 - TOYOTA MOTOR CO LTD [JP]  
• [I] JP H04158968 A 19920602 - TOYOTA MOTOR CORP

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 3960330 A1 20220302**; CN 111940702 A 20201117; CN 111940702 B 20240924; KR 20220029409 A 20220308; MA 54897 A 20220302; US 2022062979 A1 20220303

DOCDB simple family (application)  
**EP 21191812 A 20210817**; CN 202010893570 A 20200831; KR 20210110322 A 20210820; MA 54897 A 20210817; US 202117367504 A 20210705