

Title (en)
METHOD OF AND INSTALLATION FOR CASTING UNDER PRESSURE

Publication
EP 0221196 B1 19900207 (DE)

Application
EP 85114061 A 19851105

Priority
ES 54767885 D 19851008

Abstract (en)
[origin: ES8608970A1] Method of and apparatus for casting under pressure light metal alloys in which, under the action of a pressure difference, the molten metal from a furnace, disposed in a hermetically sealed chamber, is displaced via a feed tube for molten metal and fills the cavity of a casting mold, disposed in another hermetically sealed chamber, wherein before the filling of the cavity of the casting mold with molten metal, the latter is subjected to a temperature and a metallurgical pretreatment in two furnaces, which are then in succession brought in position of casting and, at the same time or later, the casting mold is brought to desired temperature parameters, the process of casting is performed, the cast body is removed from the casting mold and the cycle is repeated. The temperature of the casting mold, before and after its filling with molten metal, is regulated by controlling the powers of the cooling and the heating systems arranged within the casting mold. During the solidification of the cast body until its removal, there is regulated the deformation state of the system cast body mold by controlling the clearance and the force of seizing between the cast body and the walls of the casting mold. Both furnaces are arranged in front of the casting machine on receiving devices, carried by a horizontally movable shuttle in left or right position, and in these positions there are provided devices for metallurgical pretreatment and systems for temperature pretreatment of the molten metal in the furnaces.

IPC 1-7
B22D 17/06; **B22D 18/00**; **B22D 27/09**; **B22D 27/13**

IPC 8 full level
B22D 18/00 (2006.01); **B22D 18/08** (2006.01)

CPC (source: EP US)
B22D 18/00 (2013.01 - EP US); **B22D 18/08** (2013.01 - EP US)

Citation (examination)
Broshure from firm DIMO, Monmouthshire, GB

Cited by
US9797031B2; US9982329B2; WO2019071285A1; WO2011003396A1; DE102010026480A1; US8783331B2; US9415441B2; EP3395473A1; EP3694660B1

Designated contracting state (EPC)
AT CH DE FR GB IT LI SE

DOCDB simple family (publication)
EP 0221196 A1 19870513; **EP 0221196 B1 19900207**; ES 547678 A0 19860901; ES 8608970 A1 19860901; JP S6293057 A 19870428; US 4671342 A 19870609

DOCDB simple family (application)
EP 85114061 A 19851105; ES 547678 A 19851008; JP 22499485 A 19851011; US 80123985 A 19851125