

Title (en)
Casting method and casting apparatus

Title (de)
Gießverfahren und -Vorrichtung

Title (fr)
Procédé de moulage et appareil de moulage

Publication
EP 2347840 A3 20111109 (EN)

Application
EP 11151616 A 20110121

Priority
• JP 2010011751 A 20100122
• JP 2010063237 A 20100318
• JP 2010063241 A 20100318
• JP 2010063246 A 20100318

Abstract (en)
[origin: EP2347840A2] A casting apparatus (10A) has a long cooling jig (18) inclined with respect to a vertical direction. A melt (34) is supplied to and flowed on a bottom surface (36a) of the cooling jig (18), whereby a solid phase is generated in the melt (34) to obtain a semi-solid slurry (48), and the semi-solid slurry (48) is transferred into and solidified in a cavity (24) of a mold (12) to obtain a casting. The casting apparatus (10A) further has a release agent application unit (42), and a release agent (44) is applied by the application unit (42) to the bottom surface (36a) of the cooling jig (18) in a direction toward a supply of the melt (34) at an angle of less than 90° to the bottom surface (36a) before supplying the melt (34) to the cooling jig (18).

IPC 8 full level
B22D 17/30 (2006.01); **B22D 25/00** (2006.01)

CPC (source: EP US)
B22D 17/30 (2013.01 - EP US); **B22D 35/00** (2013.01 - EP US)

Citation (search report)
• [Y] US 2005161127 A1 20050728 - ADACHI MITSURU [JP], et al
• [Y] JP H10156508 A 19980616 - UBE INDUSTRIES
• [Y] DE 19810032 A1 19990916 - ACHESON IND INC [US]
• [A] JP 2005059044 A 20050310 - UBE MACHINERY CORP LTD
• [AD] JP 2006305618 A 20061109 - CHIBA INST TECHNOLOGY
• [Y] DE 102005040966 A1 20070308 - SILAGHI CHRISTINE [DE]
• [A] EP 1970144 A1 20080917 - HONDA MOTOR CO LTD [JP]

Cited by
CN106623819A

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 2347840 A2 20110727; EP 2347840 A3 20111109; US 2011180228 A1 20110728

DOCDB simple family (application)
EP 11151616 A 20110121; US 201113009059 A 20110119