

Title (en)

Supply method and apparatus for semi-solid metal

Title (de)

Verfahren und Vorrichtung für die Zufuhr eines halbfesten Metalls

Title (fr)

Procédé d'alimentation et appareil d'alimentation de métal semi solide

Publication

**EP 1970144 A1 20080917 (EN)**

Application

**EP 08152690 A 20080313**

Priority

JP 2007068468 A 20070316

Abstract (en)

A supply apparatus supplies a semi-solid metal to a molding apparatus having an injection sleeve (31) formed with an opening portion (31A) and a plunger (32) provided progressively/regressively at an inner portion of the injection sleeve. The supply apparatus includes a crucible (11) in a shape of a cylinder containing a semi-solid metal, a carry arm (13) for grabbing to move the crucible (11), and a control apparatus for controlling the carry arm (13). The control apparatus inserts a front end portion (134) of a gutter (131) mounted to the crucible into (11) the opening portion (31A) of the injection sleeve (31) by a predetermined angle to inject the semi-solid metal to a side of a direction of advancing the plunger (32) more than at a position formed with the opening portion (31A) at inside of the injection sleeve (31).

IPC 8 full level

**B22D 17/00** (2006.01)

CPC (source: EP US)

**B22D 17/007** (2013.01 - EP US)

Citation (applicant)

- EP 0903193 A1 19990324 - UBE INDUSTRIES [JP]
- WO 2006120980 A1 20061116 - TOKYORIKI INC [JP], et al

Citation (search report)

- [X] EP 1649951 A1 20060426 - HONDA MOTOR CO LTD [JP]
- [A] EP 0903193 A1 19990324 - UBE INDUSTRIES [JP] & JP H10211565 A 19980811 - UBE INDUSTRIES
- [A] WO 2006120980 A1 20061116 - TOKYORIKI INC [JP], et al

Cited by

EP2347840A3; US2022080499A1

Designated contracting state (EPC)

DE FR GB

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 1970144 A1 20080917; EP 1970144 B1 20100512**; CN 101264510 A 20080917; DE 602008001182 D1 20100624; JP 2008229633 A 20081002; US 2008223540 A1 20080918

DOCDB simple family (application)

**EP 08152690 A 20080313**; CN 200810083008 A 20080317; DE 602008001182 T 20080313; JP 2007068468 A 20070316; US 4611708 A 20080311