

Title (en)

A method and an apparatus for supplying molten metal

Title (de)

Verfahren und Vorrichtung zum Zuführen flüssigen Metalls

Title (fr)

Procédé et dispositif pour l'alimentation de métal liquide

Publication

EP 0799661 A3 19990707 (EN)

Application

EP 97105443 A 19970402

Priority

JP 8155996 A 19960403

Abstract (en)

[origin: EP0799661A2] A method and an apparatus for supplying molten metal to a casting machine wherein the amount of molten metal supplied can be controlled precisely and defective castings caused by slag in the molten metal can be prevented. Material supply means (2) supplies a ladle (1) with a suitable amount of a casting material for one shot of casting in a solid state. After the solid casting material (14) is melted into molten metal, the molten metal is supplied from the ladle to the casting machine. By controlling the amount of molten metal supplied by means of the casting material in the solid state, the precision of quantity control of molten metal can be enhanced. In addition, because the molten metal is supplied from the ladle to the casting machine soon after the casting material is melted, the time for molten metal to be exposed to the air can be shortened, and slag generation due to molten metal oxidization can be suppressed.

IPC 1-7

B22D 17/30; **B22D 39/02**; **B22D 39/00**

IPC 8 full level

G01F 1/00 (2006.01); **B22D 17/30** (2006.01); **B22D 39/00** (2006.01); **B22D 39/02** (2006.01)

CPC (source: EP KR)

B22D 17/30 (2013.01 - EP); **B22D 39/02** (2013.01 - EP); **B22D 39/026** (2013.01 - EP); **B22D 41/00** (2013.01 - KR); **B22D 41/14** (2013.01 - KR); **B22D 37/00** (2013.01 - KR)

Citation (search report)

- [XY] GB 820572 A 19590923 - E M B CO LTD
- [XY] FR 1311735 A 19621207
- [XY] FR 953639 A 19491209 - HPM DEV CORP
- [XY] FR 2174204 A1 19731012 - AEG ELOTHERM GMBH [DE]
- [XY] FR 2262269 A1 19750919 - GKN GROUP SERVICES LTD [GB]
- [XY] GB 1378881 A 19741227 - GKN GROUP SERVICES LTD
- [XY] FR 1478028 A 19670421
- [XY] FR 1458704 A 19660304 - VOLKSWAGENWERK AG
- [Y] PATENT ABSTRACTS OF JAPAN vol. 009, no. 191 (M - 402) 7 August 1985 (1985-08-07)

Cited by

DE10043717A1; US11931796B2

Designated contracting state (EPC)

DE SE

DOCDB simple family (publication)

EP 0799661 A2 19971008; **EP 0799661 A3 19990707**; CN 1168827 A 19971231; JP H09271930 A 19971021; KR 970069196 A 19971107

DOCDB simple family (application)

EP 97105443 A 19970402; CN 97104984 A 19970403; JP 8155996 A 19960403; KR 19970012089 A 19970402