

Title (en)

METAL-CASTING METHOD AND APPARATUS, CASTING SYSTEM AND CAST-FORGING SYSTEM

Title (de)

METALLGIESSVERFAHREN UND -VORRICHTUNG, SYSTEM UND GIESS-SCHMIEDE-SYSTEM

Title (fr)

PROCEDE ET APPAREIL DE COULEE DE METAL, SYSTEME DE COULEE ET SYSTEME DE FORGEAGE DE PIECES COULEES

Publication

EP 1317327 A4 20050831 (EN)

Application

EP 01961268 A 20010831

Priority

- JP 0107553 W 20010831
- JP 2000266271 A 20000901
- JP 2000266665 A 20000904
- JP 2000297636 A 20000928
- US 25137900 P 20001206
- US 25138200 P 20001206
- US 25138100 P 20001206

Abstract (en)

[origin: WO0218072A1] An automatic continuous casting system for producing a cast body, comprising: a casting apparatus that makes use of unidirectional solidification of molten metal and includes a molten metal reservoir (4) and a mold (5), in which molten metal in a molten metal source (2) is supplied through transfer means (3) to the molten reservoir, and the molten metal (45) supplied into the molten metal reservoir is supplied through an opening/closing plug (43) into the mold; target weight calculation/storing means (8) for calculating, on the basis of compositional proportions of metal elements contained in the molten metal (45), a specific gravity of an alloy obtained through solidification of the molten metal, calculating a target weight of a cast body on the basis of the specific gravity of the alloy and a capacity of the mold, and memorizing and storing the target weight; and first molten metal supply amount regulation means (9) for regulating an amount of the molten metal supplied from the molten metal reservoir into the mold by obtaining a measurement weight of the cast body and comparing a measurement weight of the cast body and comparing the measurement weight with the target weight.

IPC 1-7

B21D 39/04; **B22D 39/00**; **B22D 35/00**; **B22D 29/04**; **B22D 47/00**; **B22D 27/04**; **B22D 7/00**; **B22D 7/06**; **B22D 9/00**; **B22D 39/04**

IPC 8 full level

B22D 7/06 (2006.01); **B22D 9/00** (2006.01); **B22D 15/04** (2006.01); **B22D 27/04** (2006.01); **B22D 29/04** (2006.01); **B22D 39/04** (2006.01); **B22D 47/00** (2006.01)

CPC (source: EP)

B22D 7/06 (2013.01); **B22D 9/003** (2013.01); **B22D 15/04** (2013.01); **B22D 27/045** (2013.01); **B22D 29/04** (2013.01); **B22D 39/04** (2013.01); **B22D 47/00** (2013.01)

Citation (search report)

- [Y] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 11 28 November 1997 (1997-11-28)
- [Y] PATENT ABSTRACTS OF JAPAN vol. 014, no. 379 (M - 1012) 16 August 1990 (1990-08-16)
- See references of WO 0218072A1

Cited by

CN102009139A

Designated contracting state (EPC)

AT BE CH DE FR GB LI

DOCDB simple family (publication)

WO 0218072 A1 20020307; **WO 0218072 A8 20020711**; AU 8258901 A 20020313; EP 1317327 A1 20030611; EP 1317327 A4 20050831

DOCDB simple family (application)

JP 0107553 W 20010831; AU 8258901 A 20010831; EP 01961268 A 20010831