

Title (en)
METHOD AND DEVICE FOR THE WEIGHT-CONTROLLED FILLING OF INGOT MOLDS IN NON-IRON CASTING MACHINES

Title (de)
VERFAHREN UND VORRICHTUNG ZUM GEWICHTSKONTROLLIERBAREN BEFÜLLEN VON KOKILLEN AN NICHT-EISEN-GIESSMASCHINEN

Title (fr)
PROCEDE ET DISPOSITIF DE REMPLISSAGE AVEC UN POIDS PRECIS DE COQUILLES DE MACHINES DE COULEE POUR METAUX NON FERREUX

Publication
EP 1501647 B1 20060215 (DE)

Application
EP 03708217 A 20030312

Priority

- DE 10218958 A 20020427
- EP 0302522 W 20030312

Abstract (en)
[origin: WO03092928A1] The invention relates to a method for the weight-accurate filling of ingot molds in a non-iron casting machine, e.g. a copper anode casting machine or a zinc anode casting machine, which is configured in the form of casting wheels that are used for production in a fully mechanized casting operation and are provided with the ingot molds. The aim of the invention is to obtain the desired precise-weight quality of a piece and exact plane parallelism of the bordering surfaces thereof. Said aim is achieved by carrying out the following steps: first, a liquid metal is introduced into an intermediate trough (4, 4') at a regulated mass flow rate, the continuous dynamic weight increase being simultaneously determined; second, liquid metal is fed into a dosing trough (4, 4') which is located on each side of the intermediate trough (4, 4') by alternately tilting the intermediate trough (4, 4') on one side followed by the other. After filling the first dosing trough (5), the intermediate trough (4) is tilted in the direction of the second dosing trough (5') while the mass of an anode is cast from the first filled dosing trough into one of the ingot molds (10, 10') that are arranged on the casting wheel (9, 9') by means of a controlled tilting movement. Also disclosed is a device for carrying out the inventive method.

IPC 8 full level
B22D 5/00 (2006.01); **B22D 5/02** (2006.01); **B22D 37/00** (2006.01); **B22D 39/04** (2006.01)

CPC (source: EP US)
B22D 5/02 (2013.01 - EP US); **B22D 37/00** (2013.01 - EP US); **B22D 39/04** (2013.01 - EP US)

Cited by
CN105344989A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 03092928 A1 20031113; AT E317734 T1 20060315; AU 2003212338 A1 20031117; AU 2003212338 B2 20080320; CA 2483783 A1 20031113; CA 2483783 C 20100921; DE 10218958 A1 20031120; DE 10218958 B4 20100916; DE 50302425 D1 20060420; EP 1501647 A1 20050202; EP 1501647 B1 20060215; ES 2258218 T3 20060816; PE 20031003 A1 20040129; RU 2004134599 A 20050520; RU 2319579 C2 20080320; US 2005126739 A1 20050616; US 7108043 B2 20060919; ZA 200405967 B 20050608

DOCDB simple family (application)
EP 0302522 W 20030312; AT 03708217 T 20030312; AU 2003212338 A 20030312; CA 2483783 A 20030312; DE 10218958 A 20020427; DE 50302425 T 20030312; EP 03708217 A 20030312; ES 03708217 T 20030312; PE 2003000293 A 20030324; RU 2004134599 A 20030312; US 51306204 A 20041027; ZA 200405967 A 20040727