Title (en)

METHOD AND DEVICE FOR CASTING IN A MOULD

Title (de

VERFAHREN UND VORRICHTUNG ZUM GIESSEN IN EINE FORM

Title (fr)

PROCEDE ET DISPOSITIF DE COULEE DANS UN MOULE

Publication

EP 0797487 A1 19971001 (EN)

Application

EP 95941323 A 19951214

Priority

- SE 9501506 W 19951214
- SE 9404370 A 19941215

Abstract (en)

[origin: WO9618469A1] A method and a device for controlling the flow in non-solidified portions (13) of a cast strand during casting of metal in a mould which is open in both ends in the casting direction by means of a two-phase or polyphase mold stirrer comprising two or more sub-stirrers, each one at least comprising a magnetic core (14a, 14b, 14c, 14d) and an ac-fed phase winding (15a, 15b, 15c, 15d) arranged around the core, such as a foil-wound coil. The cores and the foil-wound coils included in the sub-stirrers are designed and arranged in such a way that a magnetic field is generated inside the mould, which on a level with the cores, essentially comprises a magnetic field-strength component, By, oriented across the casting direction, and on a level with the phase windings, essentially comprises a magnetic field-strength component, Bz, oriented parallel to the casting direction. The flow of the melt at and adjacent the meniscus is controlled by adjusting the position of the cores relative to the meniscus such that the action of a force which arises in the melt at and adjacent the meniscus is changed by cooperation between the currents I induced in the melt and the field-strength components, By and Bz, respectively.

IPC 1-7

B22D 11/10

IPC 8 full level

B22D 11/115 (2006.01)

CPC (source: EP)

B22D 11/115 (2013.01)

Citation (search report)

See references of WO 9618469A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**WO 9618469 A1 19960620**; AT E193986 T1 20000715; CN 1083308 C 20020424; CN 1176613 A 19980318; DE 69517599 D1 20000727; DE 69517599 T2 20010215; EP 0797487 A1 19971001; EP 0797487 B1 20000621; ES 2150593 T3 20001201; SE 513627 C2 20001009; SE 9404370 D0 19941215; SE 9404370 L 19960616

DOCDB simple family (application)

**SE 9501506 W 19951214**; AT 95941323 T 19951214; CN 95197585 A 19951214; DE 69517599 T 19951214; EP 95941323 A 19951214; ES 95941323 T 19951214; SE 9404370 A 19941215