

Title (en)

Gravity casting method in a chill mould pivotable by a robot-controlled hydraulic axis

Title (de)

Schwerkraftkokillengiessverfahren in eine um eine robotergesteuerte hydraulische Achse kippbare Kokille

Title (fr)

Procédé de coulée de type à gravité dans une coquille basculable autour d'une axe hydraulique contrôlé par un robot

Publication

**EP 1350586 A1 20031008 (EN)**

Application

**EP 03425167 A 20030319**

Priority

IT BS20020025 A 20020319

Abstract (en)

The present invention relates to a gravity casting method by a robot, wherein a molten metal is cast by the robot into the chill while the latter carries out a pivoting on its axis by a hydraulic actuator, wherein the robot follows a previously set trajectory and detects the chill position by an encoder associated to the hydraulic pivoting axis, compares it to the casting cup position and, on the basis of the difference between said two values of position, acts on the flow rate of the fluid fed to the hydraulic actuator for accelerating or slowing down the rotation of said hydraulic axis. The invention also relates to a hydraulic axis for the rotation of the chill in the chilling process served by the robot, characterised in that it is controlled by a proportional valve controlled by the robot for adjusting the speed of rotation of the chill. <IMAGE>

IPC 1-7

**B22D 39/02**; **B22D 41/06**; **B22D 23/00**; **B22D 15/04**

IPC 8 full level

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Citation (search report)

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- [A] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 01 31 January 2000 (2000-01-31)
- [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 168 (M - 1580) 22 March 1994 (1994-03-22)

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