

Title (en)

Method and apparatus for rheocasting.

Title (de)

Rheocasting-Vorrichtung und -Verfahren.

Title (fr)

Procédé et dispositif pour coulée de gelées métalliques.

Publication

EP 0490463 A1 19920617 (EN)

Application

EP 91304560 A 19910521

Priority

US 62464790 A 19901210

Abstract (en)

A method and apparatus for rheocasting (slurry casting) molten metal employ a stirring chamber (26) located upstream of a casting mold (34). Electromagnetic stirring is employed in both the stirring chamber and the casting mold. Structure (46)+(47) is provided for minimizing secondary recirculating flows in the molten metal as it flows downstream through the apparatus, for preventing hangers and for eliminating the columnar dendritic zone at the periphery of the casting. The efficiency of utilization of the magnetic field is optimized as if the agitation required for producing a desired fine, spheroidal, degenerate dendritic grain structure in the solidified casting. <IMAGE>

IPC 1-7

B22D 11/10; **C22C 1/00**

IPC 8 full level

B22D 11/115 (2006.01); **C22C 1/00** (2006.01)

CPC (source: EP)

B22D 11/115 (2013.01); **C22C 1/12** (2023.01)

Citation (search report)

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- [A] GB 2009606 A 19790620 - OLIN CORP
- [A] PATENT ABSTRACTS OF JAPAN vol. 12, no. 33 (C-472)30 January 1988 & JP-A-62 182 239 (MITSUBISHI METAL CORP) 10 August 1987

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