

Title (en)  
Centrifugal casting method, centrifugal casting apparatus, and cast alloy produced by same

Title (de)  
Schleudergussverfahren, Schleudergussvorrichtung und danach hergestellte Gusslegierung

Title (fr)  
Procédé de coulage centrifuge, appareil de coulage centrifuge et alliage

Publication  
**EP 1652606 A3 20070404 (EN)**

Application  
**EP 05028599 A 20010831**

Priority

- EP 01961254 A 20010831
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- US 23435000 P 20000922
- US 26323901 P 20010123
- JP 2001025340 A 20010201

Abstract (en)  
[origin: EP1652606A2] The present invention relates to a casting method which employs rapid solidification of metal, rare-earth metal or the like, as well as to a casting apparatus and a cast alloy. A centrifugal casting method includes the steps of pouring a molten material onto a rotary body; sprinkling the molten material by the effect of rotation of the rotary body; and causing the sprinkled molten material to be deposited and to solidify on the inner surface of a rotating cylindrical mold. The axis of rotation of the rotary body and the axis of rotation of the cylindrical mold are caused not to run parallel to each other. The centrifugal casting method can attain a decrease in average deposition rate. As a result, generation of the dendritic  $\pm$ Fe phase or generation of a segregation phase of Mn or the like is suppressed, thereby realizing a high-performance R-T-B-type rare-earth magnet alloy.

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CPC (source: EP)  
**B22D 13/04** (2013.01); **H01F 1/0577** (2013.01); **H01F 41/0293** (2013.01)

Citation (search report)

- [X] WO 0012771 A1 20000309 - SHOWA DENKO KK [JP], et al
- [X] EP 0874375 A1 19981028 - SHINETSU CHEMICAL CO [JP]
- [A] EP 0924717 A2 19990623 - SHINETSU CHEMICAL CO [JP] & EP 1033415 A1 20000906 - SHOWA DENKO KK [JP]

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

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