

Title (en)

Method and apparatus for directional solidification of a metal melt

Title (de)

Verfahren und Vorrichtung zum gerichteten Erstarren einer Metallschmelze

Title (fr)

Procédé et dispositif pour la coulée par solidification dirigée de métal en fusion

Publication

**EP 1375034 A3 20050622 (EN)**

Application

**EP 03012565 A 20030603**

Priority

US 17765802 A 20020620

Abstract (en)

[origin: EP1375034A2] Method as well as apparatus for directional solidification casting by withdrawing a melt-filled mold from an end of a casting furnace, spraying a liquid cooling medium to impinge on exterior surfaces of the mold as the mold is withdrawn, and collecting the cooling medium after it impinges on the exterior mold surfaces. <IMAGE>

IPC 1-7

**B22D 27/04**

IPC 8 full level

**B22D 27/04** (2006.01)

CPC (source: EP US)

**B22D 27/045** (2013.01 - EP US)

Citation (search report)

- [E] EP 1321208 A2 20030625 - MITSUBISHI HEAVY IND LTD [JP]
- [A] EP 0749790 A1 19961227 - ABB RESEARCH LTD [CH]
- [A] EP 1076118 A1 20010214 - ABB SCHWEIZ AG [CH]
- [A] EP 1110645 A2 20010627 - GEN ELECTRIC [US]

Cited by

CN105364001A; CN109773166A; EP2969311A4; CN102380588A; CN103878344A; CN106694857A; WO2014164593A1; US10150159B2; EP2727669A3

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