

Title (en)

Process and device for casting a metal strand

Title (de)

Verfahren und Vorrichtung zum Giessen eines Metallstranges

Title (fr)

Procédé et dispositif de coulée d'un lingot métallique

Publication

EP 1277531 A3 20030129 (FR)

Application

EP 02447058 A 20020409

Priority

BE 200100457 A 20010705

Abstract (en)

[origin: EP1277531A2] A method for casting a metal ingot of improved quality, from a distributor (1) via a nozzle (4) into a mould in which it is cooled, consists of subjecting the metal to a turning electromagnetic field to rotate the metal during its passage through the nozzle. The parameters of the electromagnetic field are modulated to optimise the agglomeration of the inclusions in the liquid metal and to cause the agglomerated inclusions formed to rise towards the distributor. An Independent claim is also included for a device for putting this method into service.

IPC 1-7

B22D 11/117; B22D 41/62; B22D 41/58

IPC 8 full level

B22D 11/11 (2006.01); **B22D 41/58** (2006.01); **B22D 41/62** (2006.01)

CPC (source: EP)

B22D 11/11 (2013.01); **B22D 41/58** (2013.01); **B22D 41/62** (2013.01)

Citation (search report)

- [Y] US 4243092 A 19810106 - HANAS BERTIL
- [XA] US 4874471 A 19891017 - WILMOTTE STEPHAN [BE]
- [A] EP 0093068 A1 19831102 - ARBED [LU]
- [XY] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 03 27 February 1998 (1998-02-27)
- [Y] PATENT ABSTRACTS OF JAPAN vol. 013, no. 199 (C - 594) 11 May 1989 (1989-05-11)
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 236 (C - 1057) 13 May 1993 (1993-05-13)

Cited by

CN103203450A; CN111299560A; JP2008513214A; US9360255B2; US10875090B2; WO2006031964A1

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