

Title (en)

Process and device for the continuous casting of metals

Title (de)

Verfahren und Vorrichtung zum Stranggiessen von Metall

Title (fr)

Procédé et dispositif pour la coulée continue de métaux

Publication

**EP 1120180 A1 20010801 (EN)**

Application

**EP 01101347 A 20010122**

Priority

IT MI20000096 A 20000126

Abstract (en)

In a continuous-casting plant which uses a tank (1) made of refractory material set on top of the crystallizer (9) for removing the meniscus and the supernatant layer (7) of covering powders from the solidification area, around the said tank there are electromagnetic means (5, 6) designed to generate variable magnetic fields for slowing down and making uniform the disordered flow of liquid metal inside the said tank, whilst at the joint between the tank and the crystallizer, other electromagnetic means (11) are set which are designed to generate a direct magnetic field so as to remove locally the liquid metal from the walls of the tank (1) and of the crystallizer (9). <IMAGE>

IPC 1-7

**B22D 11/041; B22D 11/07; B22D 11/115**

IPC 8 full level

**B22D 11/04** (2006.01); **B22D 11/07** (2006.01); **B22D 11/115** (2006.01)

CPC (source: EP US)

**B22D 11/0401** (2013.01 - EP US); **B22D 11/07** (2013.01 - EP US); **B22D 11/115** (2013.01 - EP US)

Citation (search report)

- [A] US 3987840 A 19761026 - BIRAT JEAN-PIERRE
- [A] FR 2501550 A1 19820917 - FIVES CAIL BABCOCK [FR]
- [A] EP 0620062 A1 19941019 - LORRAINE LAMINAGE [FR], et al
- [A] US 4495982 A 19850129 - KANEKO HIDEO [JP], et al
- [A] US 4450892 A 19840529 - HEINEMANN WILFRIED [CH], et al
- [A] US 4082207 A 19780404 - GARNIER MARCEL A, et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 006, no. 224 (M - 170) 9 November 1982 (1982-11-09)

Cited by

CN112496281A; CN103464706A

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