

Title (en)

Use of a copper alloy for continuous-casting moulds.

Title (de)

Verwendung einer Kupferlegierung als Werkstoff für Stranggiesskokillen.

Title (fr)

Utilisation d'un alliage de cuivre pour lingotières de coulée continue.

Publication

EP 0302255 A1 19890208 (DE)

Application

EP 88110843 A 19880707

Priority

DE 3725950 A 19870805

Abstract (en)

[origin: US4883112A] Continuous casting uses a mold made of copper alloy which includes from 0.01% to 0.15% boron, 0.01 to 0.2% magnesium, the remainder being copper as well as manufacture-dependent impurities and working additives; in addition, at least one additive from the group is used at stated percentages: from 0 to 0.05% silicon, from 0 to 0.5% Ni, from 0 to 0.03% iron, from 0 to 0.03% titanium, from 0 to 0.2% zirconium, from 0 to 0.04% phosphorus, at a total content not exceeding 0.6%, all percentages by weight; the silicon content should be from 0.02% to 0.04%, and the nickel content should be from 0.1 to 0.5%. The mold is made in several working and annealing steps, the last step should be a cold working step with at least 10% deformation.

Abstract (de)

Es wird eine Kupferlegierung aus 0,01 bis 0,15% Bor, 0,01 bis 0,2 % Magnesium, Rest Kupfer einschließlich herstellungsbedingter Verunreinigungen und üblicher Verarbeitungszusätze vorgeschlagen, die sich insbesondere als Werkstoff für Stranggießkokillen eignet.

IPC 1-7

B22D 11/04; **C22C 9/00**

IPC 8 full level

B22D 11/04 (2006.01); **B22D 11/059** (2006.01); **C22C 9/00** (2006.01)

CPC (source: EP KR US)

B22D 11/059 (2013.01 - EP US); **C22C 9/00** (2013.01 - EP KR US)

Citation (search report)

- [A] FR 2501556 A1 19820917 - KABEL METALLWERKE GHH [DE]
- [A] FR 2360682 A1 19780303 - KABEL METALLWERKE GHH [DE]
- [A] FR 2360681 A1 19780303 - KABEL METALLWERKE GHH [DE]
- [A] FR 2240958 A1 19750314 - HITACHI SHIPBUILDING ENG CO [JP]
- [A] DE 3120978 A1 19820211 - CHUETSU METAL WORKS [JP]
- [AD] US 2183592 A 19391219
- [A] SU 544698 A1 19770130

Cited by

EP1170074A1; EP0477121A1; FR2666757A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 0302255 A1 19890208; **EP 0302255 B1 19920102**; AT E71154 T1 19920115; BR 8803869 A 19890221; CA 1321293 C 19930817; DE 3725950 A1 19890216; DE 3867367 D1 19920213; ES 2039513 T3 19931001; FI 883662 A0 19880805; FI 883662 A 19890206; FI 91088 B 19940131; FI 91088 C 19940510; IN 169711 B 19911214; JP 2662421 B2 19971015; JP H01208431 A 19890822; KR 890003972 A 19890419; KR 960001714 B1 19960203; MX 169555 B 19930712; US 4883112 A 19891128; ZA 885799 B 19890927

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