

Title (en)  
CONTINUOUS CASTING MOLD AND METHOD OF CONTINUOUS CASTING FOR COPPER ALLOY

Title (de)  
STRANGGUSSFORM UND VERFAHREN ZUM STRANGGIESSEN FÜR KUPFERLEGIERUNG

Title (fr)  
MOULE DE COULAGE ET PROCEDE DE COULAGE EN CONTINU POUR ALLIAGE DE CUIVRE

Publication  
**EP 1688198 A4 20070321 (EN)**

Application  
**EP 04787939 A 20040921**

Priority  

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- JP 2003331909 A 20030924
- JP 2004097223 A 20040329
- JP 2004234641 A 20040811

Abstract (en)  
[origin: EP1688198A1] A continuous casting mold for a Cu alloy, using any one member selected from a glassy carbon, a metal-based self-lubricating composite or a graphite with a bulk density exceeding 1.92, at least for the mold member including the solidification starting position of the Cu alloy melt. A continuous casting mold for a Cu alloy, composed of any one member selected from a graphite, a ceramic and a metal member or of a combination of two or more parts of members thereof, in which at least the inner wall in the solidification starting position of the Cu alloy melt is coated with a self-lubricant or a metal-based self-lubricating composite material. A continuous casting method of a Cu alloy, comprised of giving, at the time of continuously casting the Cu alloy by an intermittent pulling out method, a vibration that has a frequency larger than the slab intermittent pulling out frequency by two orders or more and that has a component vertical to the pulling out direction of the slab, or continuously supplying a lubricant or an anti-sticking material between the inner wall of the mold and the slab.

IPC 8 full level  
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Citation (search report)  

- [XY] US 3435881 A 19690401 - SMITH WILLIAM H, et al
- [X] JP H026037 A 19900110 - NIPPON KOKAN KK
- [X] JP S59133942 A 19840801 - KOBE STEEL LTD
- [X] GB 1546307 A 19790523 - KABEL METALLWERKE GHH
- [X] WO 0247848 A1 20020620 - CONCAST STANDARD AG [CH], et al
- [Y] JP S5785652 A 19820528 - KAWASAKI STEEL CO
- See references of WO 2005028143A1

Cited by  
CN111850345A; CN104588618A; CN104046832A; CN103114218A; CN104928523A; CN104046831A; CN110396621A; CN102634688A; RU2510420C2; CN104630546A; CN106424613A

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**EP 04787939 A 20040921**; JP 2004013756 W 20040921; JP 2005514086 A 20040921; TW 93128891 A 20040923; US 38692406 A 20060323