

Title (en)
Mould pipe

Title (de)
Kokillenrohr

Title (fr)
Tube pour lingotière

Publication
EP 1393837 B1 20051109 (DE)

Application
EP 03018893 A 20030820

Priority
DE 10240457 A 20020829

Abstract (en)
[origin: EP1393837A1] Mold tube made from copper has a rectangular inner and outer cross-section with rounded longitudinal edge regions (2) and a nominal wall thickness which is 8-10 % of the distance of the inner surfaces (5) lying opposite each other on the tube mouth. The wall thickness in the longitudinal edge regions opposite the wall thickness of the wall regions between the longitudinal edge regions is 10-40 % smaller. An Independent claim is also included for an alternative mold tube.

IPC 1-7
B22D 11/041

IPC 8 full level
B22D 11/04 (2006.01); **B22D 11/041** (2006.01); **B22D 11/059** (2006.01); **B22D 11/12** (2006.01); **B22D 11/22** (2006.01)

CPC (source: EP KR US)
B22D 11/041 (2013.01 - EP US); **B22D 11/22** (2013.01 - KR)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1393837 A1 20040303; EP 1393837 B1 20051109; AT E309062 T1 20051115; AU 2003227317 A1 20040318; AU 2003227317 B2 20100304; BR 0303438 A 20040908; BR 0303438 B1 20110309; CA 2438248 A1 20040229; CA 2438248 C 20111018; CN 1313227 C 20070502; CN 1486804 A 20040407; DE 10240457 A1 20040311; DE 50301599 D1 20051215; DK 1393837 T3 20060327; ES 2248694 T3 20060316; JP 2004090090 A 20040325; JP 4318506 B2 20090826; KR 20040019951 A 20040306; MX PA03006759 A 20040505; RU 2003126443 A 20050227; RU 2319575 C2 20080320; TW 200403113 A 20040301; TW I271237 B 20070121; US 2004069458 A1 20040415; US 6918428 B2 20050719

DOCDB simple family (application)
EP 03018893 A 20030820; AT 03018893 T 20030820; AU 2003227317 A 20030730; BR 0303438 A 20030828; CA 2438248 A 20030826; CN 03154548 A 20030818; DE 10240457 A 20020829; DE 50301599 T 20030820; DK 03018893 T 20030820; ES 03018893 T 20030820; JP 2003289631 A 20030808; KR 20030059471 A 20030827; MX PA03006759 A 20030729; RU 2003126443 A 20030828; TW 92120207 A 20030724; US 64640303 A 20030822