

Title (en)
Tube mould for continuous casting

Title (de)
Rohrkokille zum Stranggiessen

Title (fr)
Lingotière tubulaire pour la coulée continue

Publication
EP 1468760 B1 20050525 (DE)

Application
EP 03008681 A 20030416

Priority
EP 03008681 A 20030416

Abstract (en)
[origin: EP1468760A1] A permanent mold for continuous casting of steel billets and shaped blooms consisting of a copper tube (3) forming a mold cavity (4), provision for water cooling, where the copper tube is completely covered by a protective jacket (12), where the copper tube has a rough external jacket (5) with a protective surface (8), and a cooling channel is located in the copper tube or in the jacket (12).

IPC 1-7
B22D 11/00; **B22D 11/04**

IPC 8 full level
B22D 11/00 (2006.01); **B22D 11/04** (2006.01); **B22D 11/055** (2006.01)

CPC (source: EP KR US)
B22D 11/00 (2013.01 - EP US); **B22D 11/04** (2013.01 - EP KR US); **B22D 11/055** (2013.01 - EP US); **B22D 11/115** (2013.01 - KR); **B22D 11/124** (2013.01 - KR); **H01F 7/02** (2013.01 - KR); **H01F 7/06** (2013.01 - KR)

Cited by
EP2055410A1; EP3284550A1; WO2020126206A1; EP2436458A1; DE102010047392A1; EP2014393A1; ITUD20120192A1; CN103056317A; KR20210105356A; EP2620236A3; AT512433B1; EP1792676A1; WO2019007656A1; EP3406368A1; EA017205B1; ITUD20130090A1; WO2016166215A1; EP3695918A1; WO2014207729A3; WO2008148465A1; WO2023041814A1; WO2014207729A2

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 1468760 A1 20041020; **EP 1468760 B1 20050525**; AR 043879 A1 20050817; AT E296174 T1 20050615; AU 2004230206 A1 20041028; AU 2004230206 B2 20081211; BR PI0409449 A 20060502; BR PI0409449 B1 20111116; CA 2522190 A1 20041028; CA 2522190 C 20090929; CN 100344394 C 20071024; CN 1774309 A 20060517; DE 50300582 D1 20050630; EG 23891 A 20071212; ES 2242119 T3 20051101; JP 2006523534 A 20061019; JP 4610548 B2 20110112; KR 101082901 B1 20111111; KR 20050109626 A 20051121; MX PA05009765 A 20060519; MY 136189 A 20080829; PL 207539 B1 20101231; PL 377699 A1 20060206; PT 1468760 E 20051031; RU 2005135447 A 20060310; RU 2316409 C2 20080210; TW 200425975 A 20041201; TW I240660 B 20051001; UA 79695 C2 20070710; US 2006237161 A1 20061026; US 7422049 B2 20080909; WO 2004091826 A1 20041028; ZA 200506874 B 20060531

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EP 03008681 A 20030416; AR P040101305 A 20040419; AT 03008681 T 20030416; AU 2004230206 A 20040407; BR PI0409449 A 20040407; CA 2522190 A 20040407; CN 200480010049 A 20040407; DE 50300582 T 20030416; EG NA2005000605 A 20051002; EP 2004003712 W 20040407; ES 03008681 T 20030416; JP 2006505043 A 20040407; KR 20057019234 A 20051010; MX PA05009765 A 20040407; MY PI20041352 A 20040413; PL 37769904 A 20040407; PT 03008681 T 20030416; RU 2005135447 A 20040407; TW 93110157 A 20040412; UA A200510838 A 20040407; US 55037306 A 20060628; ZA 200506874 A 20050826