

Title (en)

METHOD AND DEVICE FOR CONTINUOUS CASTING OF LIQUID STEEL

Title (de)

VORRICHTUNG UND VERFAHREN ZUM STRANGGIESSEN VON FLÜSSIGEM STAHL

Title (fr)

PROCEDE ET DISPOSITIF POUR COULER EN CONTINU DE L'ACIER LIQUIDE

Publication

EP 1330322 A1 20030730 (FR)

Application

EP 01971525 A 20010918

Priority

- BE 0100158 W 20010918
- BE 200000643 A 20001010

Abstract (en)

[origin: WO0230598A1] The invention concerns a nozzle mainly consisting, when viewed in vertical position and in the forward movement of the liquid steel from the top downwards, of a vertical conduit (5) comprising in its upper part a distributing member, arranged substantially at the intake of said conduit and including a dome (6) for deflecting the metal penetrating into the nozzle, which is also provided with means for injecting a gaseous, liquid or solid finely divided material beneath said dome (6) into a so-called inner zone (11). The dome (6) of said distributing member is provided with means for separating liquid steel into two jets (B, C), a jet (B) flowing into the so-called inner zone (11) and penetrating into the ingot mould (1) through a first orifice (9) at the lower base of said conduit (5) and a jet (C) flowing into a so-called outer zone (12) and penetrating into the ingot mould (1) through lateral orifices (8) located in the vertical wall of said conduit (5).

IPC 1-7

B22D 41/58; **B22D 11/112**

IPC 8 full level

B22D 11/10 (2006.01); **B22D 11/108** (2006.01); **B22D 11/112** (2006.01); **B22D 11/16** (2006.01); **B22D 11/18** (2006.01); **B22D 41/58** (2006.01)

CPC (source: EP KR US)

B22D 11/112 (2013.01 - EP US); **B22D 41/50** (2013.01 - KR); **B22D 41/58** (2013.01 - EP US)

Citation (search report)

See references of WO 0230598A1

Cited by

US11744744B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0230598 A1 20020418; AT E311267 T1 20051215; BE 1013745 A3 20020702; CA 2424085 A1 20020418; CA 2424085 C 20091215; DE 60115489 D1 20060105; DE 60115489 T2 20060720; EP 1330322 A1 20030730; EP 1330322 B1 20051130; ES 2253420 T3 20060601; JP 2004509771 A 20040402; JP 4562347 B2 20101013; KR 100842026 B1 20080627; KR 20030037684 A 20030514; US 2003173721 A1 20030918; US 6913170 B2 20050705

DOCDB simple family (application)

BE 0100158 W 20010918; AT 01971525 T 20010918; BE 200000643 A 20001010; CA 2424085 A 20010918; DE 60115489 T 20010918; EP 01971525 A 20010918; ES 01971525 T 20010918; JP 2002534025 A 20010918; KR 20037005098 A 20030410; US 36235603 A 20030227