

Title (en)

Ingot mould with large cross section for the hot top type vertical continuous casting of metals

Title (de)

Grossflächige Vertikal-Stranggiesskokille mit Einsatz zum Stranggiessen von Metallen

Title (fr)

Lingotière à section large pour la coulée continue verticale en charge des métaux

Publication

**EP 1097762 B1 20030625 (FR)**

Application

**EP 00402986 A 20001027**

Priority

FR 9914030 A 19991105

Abstract (en)

[origin: EP1097762A1] A large sectioned ingot mould for the vertical continuous casting of metals comprises a cooled tubular metal element (9) and capped by a hot top (8) of thermal insulating refractory. The tubular element (9) is formed by an assembly of metal plates defining a measuring passage (12) for the cast metal, certain (14) of these plates termed as larger walls being backed with a rigidly fixed reinforcing counter plate (16). The ingot mould is characterised in that the upper part of each large wall (14) presents a recessed shoulder (23) with respect to the inner passage (12) for the cast metal in order to hold one (24) of the jaws of a clamping clip (22), of elongated form assuring a clamping continuously distributed along the said large wall (14), and being covered by the top of this latter and its associated counter plate (16) in contact with the other jaw (28) of the clip (22). A system (29, 30) for the regulation of the clamping of the plate (14) and counter plate (16) is provided on the clip (22). The shoulder (23) also provides a space left free by the clip (22) to receive the refractory hot top (8).

IPC 1-7

**B22D 11/057**; **B22D 11/103**; **B22D 11/041**; **B22D 11/04**

IPC 8 full level

**B22D 11/041** (2006.01); **B22D 11/04** (2006.01); **B22D 11/10** (2006.01)

CPC (source: EP KR US)

**B22D 11/0401** (2013.01 - EP US); **B22D 11/10** (2013.01 - KR)

Cited by

EP1332812A1; BE1014604A3; CN102601327A

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**EP 1097762 A1 20010509**; **EP 1097762 B1 20030625**; AT E243582 T1 20030715; BR 0005238 A 20010619; BR 0005238 B1 20090113; CA 2324617 A1 20010505; CA 2324617 C 20080513; CN 1211174 C 20050720; CN 1294950 A 20010516; DE 60003505 D1 20030731; DE 60003505 T2 20040429; ES 2202021 T3 20040401; FR 2800654 A1 20010511; FR 2800654 B1 20011214; JP 2001138012 A 20010522; JP 4550988 B2 20100922; KR 100734793 B1 20070703; KR 20010051445 A 20010625; US 6419004 B1 20020716

DOCDB simple family (application)

**EP 00402986 A 20001027**; AT 00402986 T 20001027; BR 0005238 A 20001106; CA 2324617 A 20001102; CN 00133805 A 20001103; DE 60003505 T 20001027; ES 00402986 T 20001027; FR 9914030 A 19991105; JP 2000334144 A 20001101; KR 20000065345 A 20001104; US 70589100 A 20001106