

Title (en)

Continuous casting mold with removable insert.

Title (de)

Stranggiesskokille mit wechselbarem Einsatz.

Title (fr)

Lingotière de coulée continue avec insert remplaçable.

Publication

EP 0355940 A1 19900228 (EN)

Application

EP 89300988 A 19890201

Priority

US 21222688 A 19880627

Abstract (en)

Apparatus comprising a continuous casting mold (18) for horizontal steel casting having a removable insert (32) constituting the entry end of the mold. The insert (32) may be of a material that is more wear resistant and has better thermal conductivity than the remainder of the mold (18). The insert (32) may be of a conductive ceramic material and may have an integral break ring (34, 36, 38) formed thereon, with the break ring (34, 36, 38) being of a non-conductive ceramic material.

IPC 1-7

B22D 11/04

IPC 8 full level

B22D 11/04 (2006.01); **B22D 11/047** (2006.01); **B22D 11/059** (2006.01)

CPC (source: EP)

B22D 11/0475 (2013.01); **B22D 11/059** (2013.01)

Citation (search report)

- [X] EP 0187513 A2 19860716 - NIPPON KOKAN KK [JP]
- [X] DE 2520091 A1 19761118 - DAVY LOEWY LTD
- [A] EP 0265174 A2 19880427 - UNION CARBIDE CORP [US]
- [X] US 3381741 A 19680507 - GARDNER GEORGE R
- [X] PATENT ABSTRACTS OF JAPAN, vol. 9, no. 282 (M-428)[2005], 9th November 1985; & JP-A-60 124 444 (KAWASAKI JUKOGYO K.K.) 03-07-1985
- [X] PATENT ABSTRACTS OF JAPAN, vol. 10, no. 342 (M-536)[2398], 19th November 1986; & JP-A-61 144 244 (KAWASAKI HEAVY IND. LTD.) 01-07-1986

Cited by

CN102814477A; US7975756B2; US8042601B2; WO0114084A1; WO9100157A1; WO2010148454A1; WO0247848A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0355940 A1 19900228; **EP 0355940 A3 19911030**; CA 1323745 C 19931102; JP H0220644 A 19900124

DOCDB simple family (application)

EP 89300988 A 19890201; CA 599863 A 19890516; JP 6941889 A 19890323