

Title (en)

METHOD AND MACHINE FOR THE PRODUCTION OF A CONTINUOUSLY-CAST PRECURSOR

Title (de)

VERFAHREN UND ANLAGE ZUM HERSTELLEN EINES STRANGGEGOSSENEN VORPRODUKTES

Title (fr)

PROCEDE ET DISPOSITIF POUR LA PRODUCTION D'UNE EBAUCHE COULEE EN CONTINU

Publication

EP 1286799 A1 20030305 (DE)

Application

EP 01933740 A 20010323

Priority

- AT 9562000 A 20000531
- EP 0103304 W 20010323

Abstract (en)

[origin: WO0191951A1] The invention relates to a method for the production of a continuously-cast precursor; in particular of wide slabs, with a precursor thickness $D > 100$ mm and a precursor width $B = 2700$ mm to 3500 mm at a casting speed $v_c < 2$ m/min in a continuous casting plant, a continuous casting plant for producing the above and a submerged outlet for the above. According to the invention, uniform solidification conditions for the cast strip and uniform melting and distribution conditions for the flux powder may be achieved, whereby the melt leaves the submerged outlet (6) through opposing exit openings (8), with a momentum towards the narrow side walls (4, 5) of the mould. For a particular width-thickness ratio of the precursor, depending on the ratio of the melt speed in the core cross-section of the submerged outlet (v_k) to the casting speed (v_c), design values for the width (b) of the submerged tube and the height (h) of the side openings of the submerged outlet are chosen such as to give a uniform strip shell formation in the direction of casting and circumferentially along the broad side walls (2, 3) and the narrow side walls of the mould.

IPC 1-7

B22D 41/50; **B22D 11/10**

IPC 8 full level

B22D 11/10 (2006.01); **B22D 41/50** (2006.01)

CPC (source: EP US)

B22D 11/10 (2013.01 - EP US); **B22D 41/50** (2013.01 - EP US)

Citation (search report)

See references of WO 0191951A1

Designated contracting state (EPC)

BE DE FR GB IT SE

DOCDB simple family (publication)

WO 0191951 A1 20011206; AT 408962 B 20020425; AT A9562000 A 20010915; CN 1208159 C 20050629; CN 1446137 A 20031001; DE 50111455 D1 20061228; EP 1286799 A1 20030305; EP 1286799 B1 20061115; US 2003159796 A1 20030828; US 6857465 B2 20050222

DOCDB simple family (application)

EP 0103304 W 20010323; AT 9562000 A 20000531; CN 01813698 A 20010323; DE 50111455 T 20010323; EP 01933740 A 20010323; US 29728503 A 20030425