

Title (en)

DEVICE FOR THE CONTINUOUS CASTING OF QUICKLY SOLIDIFYING MATERIALS

Publication

EP 0237008 B1 19891227 (DE)

Application

EP 87103349 A 19870309

Priority

CH 105286 A 19860314

Abstract (en)

[origin: US4721154A] During the melt spinning process for producing metal foils having an amorphous structure, molten metal is cast through a slot-like nozzle onto a surface or wall which is rapidly moved past the nozzle. A particularly rapid quenching and cooling rate of the solidifying melt is achieved by providing cooling support elements which are supplied with a cooling pressure medium, on one side of the moved surface or wall and which aide is located opposite to or remote from the nozzle. Advantageously, the surface or wall is constructed as a thin-walled cylindrical shell or tube which is elastically deformable to some extent. In its shell interior, there are provided a number of rows of cooling support elements which may be controlled by thickness sensors and temperature profile sensors. There is thus rendered possible, the continuous production of amorphous metal foils.

IPC 1-7

B22D 11/06

IPC 8 full level

B22D 11/06 (2006.01)

CPC (source: EP US)

B22D 11/0677 (2013.01 - EP US); **B22D 11/0682** (2013.01 - EP US)

Cited by

CN110076308A; FR2742683A1; US6056039A; CN1082857C; WO2006063847A1; WO9723318A1

Designated contracting state (EPC)

BE DE ES FR GB IT SE

DOCDB simple family (publication)

EP 0237008 A1 19870916; EP 0237008 B1 19891227; CH 671534 A5 19890915; DE 3617608 A1 19870917; DE 3617608 C2 19900719; DE 3761244 D1 19900201; ES 2012464 B3 19900401; JP S62220251 A 19870928; US 4721154 A 19880126

DOCDB simple family (application)

EP 87103349 A 19870309; CH 105286 A 19860314; DE 3617608 A 19860523; DE 3761244 T 19870309; ES 87103349 T 19870309; JP 5696487 A 19870313; US 2442587 A 19870311