

Title (en)
Method and device for casting preforms in a continuous casting machine

Title (de)
Verfahren und Anlage zum Giessen von Vorprodukten in einer Stranggiessanlage

Title (fr)
Procédé et dispositif pour la coulée d'ébauches dans une machine de coulée continue

Publication
EP 1125657 B1 20050119 (DE)

Application
EP 01103849 A 20010216

Priority
DE 10007706 A 20000219

Abstract (en)
[origin: CA2337451A1] In a method for casting prefabricated products in a continuous casting device, having a casting mold and a strand guide downstream of the casting mold, wherein the strand guide has rolls positioned opposite one another in pairs for supporting and guiding the solidifying cast strand, wherein some rolls are drive rolls and others are idle rolls, wherein drives are provided for the drive rolls, and wherein the drive rolls are adjustable against the cast strand in order to transmit guiding forces and strand conveying forces onto the cast strand in interaction with the idle rolls, the drive rolls and the drives are controlled to a preset rotational speed such that the drive rolls have circumferential speeds identical to one another within the limits of a preset casting speed. The motor torques of the drives are maintained at a level as equal as possible below a permissible torque limit value relative to a loadability of the strand shell. For a single drive and corresponding drive roll the permissible torque limit value is measured by continuously increasing the drive torque starting at zero and monitoring the rotational speed of the drive roll, while the remaining drive rolls are controlled to a preset nominal casting speed. For a superproportional increase of the rotational speed, the torque limit value is determined and the process is stopped.

IPC 1-7
B22D 11/128; **B22D 11/20**; **B22D 11/16**

IPC 8 full level
B22D 11/16 (2006.01); **B22D 11/04** (2006.01); **B22D 11/128** (2006.01); **B22D 11/20** (2006.01)

CPC (source: EP US)
B22D 11/0405 (2013.01 - EP US)

Cited by
CN113523214A; EP1249288A3; DE102010062355A1; US9336179B2; US9880972B2; US10409766B2

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)
EP 1125657 A2 20010822; **EP 1125657 A3 20030910**; **EP 1125657 B1 20050119**; AT E287304 T1 20050215; CA 2337451 A1 20010819; CA 2337451 C 20080916; DE 10007706 A1 20010823; DE 50105091 D1 20050224; JP 2001259813 A 20010925; JP 4842444 B2 20111221; MX PA01001831 A 20030820; US 2001035278 A1 20011101; US 2002070000 A1 20020613; US 6371197 B2 20020416; US 6609556 B2 20030826

DOCDB simple family (application)
EP 01103849 A 20010216; AT 01103849 T 20010216; CA 2337451 A 20010216; DE 10007706 A 20000219; DE 50105091 T 20010216; JP 2001038809 A 20010215; MX PA01001831 A 20010219; US 7535002 A 20020214; US 78431801 A 20010214