

Title (en)

Cylinder for continuous casting plant for thin metallic strips.

Title (de)

Zylinder für Bandstranggiessanlage.

Title (fr)

Cylindre pour dispositif de coulée continue de bandes minces de métal.

Publication

EP 0429385 A1 19910529 (FR)

Application

EP 90470060 A 19901107

Priority

FR 8915339 A 19891122

Abstract (en)

The cylinder (1) comprises a central block (2) faced with a binder (shrink ring) (3) under which cooling channels (4) are provided; the block (2) is chosen in a material with a high coefficient of expansion and equipped with heating resistors (6) adjusted so as to cause a radial expansion of the block (2) of the same value as that of the binder (shrink ring) (3). This arrangement eliminates any differential expansion between the central block and the binder (shrink ring) and, consequently, ensures the mechanical holding of the latter on its support during casts without requiring flanging.
<IMAGE>

Abstract (fr)

Le cylindre (1) comporte un bloc central (2) revêtu d'une frette (3) sous laquelle sont ménagés des canaux de refroidissement (4); le bloc (2) est choisi en un matériau à fort coefficient de dilatation et muni de résistances (6) de chauffage réglées de manière à provoquer une dilatation radiale du bloc (2) de même valeur que celle de la frette (3). Cet agencement supprime toute dilatation différentielle entre le bloc central et la frette et par conséquent assure la tenue mécanique de cette dernière sur son support pendant les coulées sans nécessiter un bridage.

IPC 1-7

B22D 11/06

IPC 8 full level

B22D 11/06 (2006.01)

CPC (source: EP)

B22D 11/0651 (2013.01)

Citation (search report)

- [Y] FR 1290938 A 19620420 - SAINT GOBAIN
- [A] FR 1343136 A 19631115 - GOODYEAR TIRE & RUBBER
- [A] FR 1256204 A 19610317
- [A] FR 679692 A 19300416 - UNITED GLASS BOTTLE MFG LTD
- [Y] PATENT ABSTRACTS OF JAPAN, vol. 8, no. 191 (M-322)[1628], 4 septembre 1984; & JP-A-59 082 149 (SHIN NIPPON SEITETSU K.K.) 12-05-1984

Cited by

AU659364B1; CN110214060A; EP1506828A1; US5393321A; EP1122004A1; US6261487B1; US7455635B2; WO9734754A1; WO9303194A1; WO03024645A1; WO2018141744A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 0429385 A1 19910529; AU 6678590 A 19910530; CA 2030476 A1 19910523; FI 905742 A0 19901121; FI 905742 A 19910523; FR 2654656 A1 19910524; IE 904168 A1 19910522; JP H03169462 A 19910723; NO 905017 D0 19901120; NO 905017 L 19910523; PT 95950 A 19910913

DOCDB simple family (application)

EP 90470060 A 19901107; AU 6678590 A 19901121; CA 2030476 A 19901121; FI 905742 A 19901121; FR 8915339 A 19891122; IE 416890 A 19901119; JP 31761890 A 19901121; NO 905017 A 19901120; PT 9595090 A 19901121