Title (en)

METHOD AND DEVICE FOR COOLING AND GUIDING A BEAM BLANK IN A CURVED SECONDARY COOLING ZONE OF A BEAM BLANK CASTER

Title (de)

VERFAHREN UND VORRICHTUNG ZUM KÜHLEN UND FÜHREN EINES VORBLOCKES IN DER GEBOGENEN SEKUNDÄRKÜHLZONE EINER VORBLOCKGIESSMASCHINE

Title (fr)

PROCEDE ET DISPOSITIF PERMETTANT DE REFROIDIR ET DE GUIDER UNE EBAUCHE DE PROFILE DANS UNE ZONE DE REFROIDISSEMENT SECONDAIRE INCURVEE D'UNE COULEUSE D'EBAUCHES PROFILES

Publication

EP 1390170 A1 20040225 (EN)

Application

EP 02726234 A 20020402

Priority

- EP 0203603 W 20020402
- LU 90751 A 20010403

Abstract (en)

[origin: WO02081124A1] A device for cooling and guiding a beam blank (12) in a curved secondary cooling zone (24) of a beam blank caster (10) comprises an intrados web support roller (46) with a cylindrical bearing surface (64) that is interrupted by groove means, comprising for example a plurality of axially spaced ring-shaped grooves (66). This groove means is designed so as to avoid an over-flow generating cooling water dam up behind the intrados web support roller (46) by channelling sufficient cooling water underneath the intrados web support roller (46) axially through the intrados channel (42) of the beam blank (12). It has indeed been discovered that such a cooling water overflow can produce a quench of the intrados tips (52', 52") of the flanges (16', 16"), which results in transverse cracks of these tips during straightening of the beam blank (12).

IPC 1-7

B22D 11/00; B22D 11/124; B22D 11/128

IPC 8 full level

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CPC (source: EP KR US)

B22D 11/009 (2013.01 - EP US); **B22D 11/124** (2013.01 - EP KR US); **B22D 11/1287** (2013.01 - EP US)

Citation (search report)

See references of WO 02081124A1

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WO 02081124 A1 20021017; EP 1390170 A1 20040225; JP 2004534655 A 20041118; KR 20030090705 A 20031128; LU 90751 B1 20021004; PL 363030 A1 20041115; US 2005028962 A1 20050210

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