

Title (en)

DEVICE AND METHOD FOR SECONDARY COOLING IN A CONTINUOUS CASTING SYSTEM

Title (de)

VORRICHTUNG UND VERFAHREN ZUR SEKUNDÄRKÜHLUNG IN EINER STRANGGIESSANLAGE

Title (fr)

DISPOSITIF ET PROCÉDÉ DE REFROIDISSEMENT SECONDAIRE DANS UNE INSTALLATION DE COULÉE CONTINUE

Publication

**EP 2334452 A1 20110622 (DE)**

Application

**EP 09736122 A 20090921**

Priority

- EP 2009006787 W 20090921
- DE 102008049834 A 20081001
- DE 102009010251 A 20090224

Abstract (en)

[origin: WO2010037480A1] The invention relates to a device and to a method for secondary cooling in a continuous casting system and to a continuous casting system designed accordingly. According to the invention, nozzles (3) are arranged between two rolls or rollers (2) adjacent to each other in the casting direction, in a roller guide or in a strand guide, said nozzles applying coolant onto the surface of the strand 1, 1, 1". According to the invention, the vertical distance of the nozzles (3) to the strand 1, 1, 1" remains constant, wherein the nozzles (3) can be moved independently of each other parallel to the longitudinal axis of the rollers (2) by a displacement and positioning device (4). Thus a low space requirement and high flexibility during cooling of a strand 1, 1, 1" is achieved. According to the invention, overspraying of the strand edge can thus be prevented, intensive cooling of the strand center is made possible, an asymmetrical strand course can be taken into consideration in the cooling, and strands in a multistrand operation can be optimally cooled.

IPC 8 full level

**B22D 11/124** (2006.01); **B22D 11/22** (2006.01)

CPC (source: EP)

**B22D 11/1246** (2013.01)

Citation (search report)

See references of WO 2010037480A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**DE 102009010251 A1 20100408**; CN 102170983 A 20110831; CN 102170983 B 20170524; EP 2334452 A1 20110622;  
EP 2334452 B1 20120801; WO 2010037480 A1 20100408

DOCDB simple family (application)

**DE 102009010251 A 20090224**; CN 200980139762 A 20090921; EP 09736122 A 20090921; EP 2009006787 W 20090921