

Title (en)  
METHOD FOR OPEN-LOOP OR CLOSED-LOOP CONTROL OF THE TEMPERATURE OF A CASTING STRAND IN A CONTINUOUS CASTING MACHINE

Title (de)  
VERFAHREN ZUR STEUERUNG ODER REGELUNG DER TEMPERATUR EINES GIEßSTRANGS IN EINER STRANGGIEßANLAGE

Title (fr)  
PROCÉDÉ DE COMMANDE OU DE RÉGULATION DE LA TEMPÉRATURE D'UNE BARRE COULÉE DANS UNE INSTALLATION DE COULÉE CONTINUE

Publication  
**EP 3849729 A1 20210721 (DE)**

Application  
**EP 19758973 A 20190826**

Priority  
• DE 102018215583 A 20180913  
• EP 2019072687 W 20190826

Abstract (en)  
[origin: WO2020052944A1] The invention relates to a method for open-loop or closed-loop control of the temperature of a casting strand (10) in a continuous casting machine (12). Once discharged from a die (14), the casting strand (10) is guided in a conveying direction (F) by a supporting strand guide (16) of the continuous casting machine (12), which has a secondary cooling system, the secondary cooling system being adjusted by an open-loop or closed-loop control unit (18) and the surfaces of the casting strand (10) being cooled in this way. A temperature field is calculated for the casting strand (10) in its conveying direction (F) within the supporting strand guide, and on this basis a position of the sump tip (PS) of the casting strand (10) is determined. A plurality of target temperature curves for the surface of the casting strand (10) are stored in a memory (19) of the open-loop or closed-loop control unit (18) for a material of the casting strand (10) to be cast. For closed-loop control of the temperature of the casting strand (10), a suitable target temperature curve is selected according to or as a function of the position of the sump tip of the casting strand (10).

IPC 8 full level  
**B22D 11/124** (2006.01); **B22D 11/22** (2006.01)

CPC (source: EP)  
**B22D 11/124** (2013.01); **B22D 11/225** (2013.01)

Citation (search report)  
See references of WO 2020052944A1

Designated contracting state (EPC)  
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2020052944 A1 20200319**; DE 102018215583 A1 20200319; EP 3849729 A1 20210721; EP 3849729 B1 20221102

DOCDB simple family (application)  
**EP 2019072687 W 20190826**; DE 102018215583 A 20180913; EP 19758973 A 20190826