

Title (en)
METHOD AND DEVICE FOR EQUALIZATION OF THE HEAT TRANSFER OF A CAST PRODUCT DURING THE SOLIDIFICATION THEREOF ON A METAL CONVEYOR BELT OF A HORIZONTAL STRIP CASTING SYSTEM

Title (de)
VERFAHREN UND VORRICHTUNG ZUR VERGLEICHMÄSSIGUNG DES WÄRMEÜBERGANGS EINES GUSSPRODUKTS WÄHREND SEINER ERSTARRUNG AUF DEM METALLTRANSPORTBAND EINER HORIZONTAL EN BANDGIESSANLAGE

Title (fr)
PROCÉDÉ ET DISPOSITIF D'UNIFORMISATION DU TRANSFERT THERMIQUE D'UN PRODUIT COULÉ PENDANT SA SOLIDIFICATION SUR LA BANDE TRANSPORTEUSE MÉTALLIQUE D'UNE INSTALLATION DE COULÉE HORIZONTALE SUR BANDE

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Abstract (en)
[origin: CA2693895A1] In the casting close to the final measuring of rectangular billets made of metal and the subsequent further processing thereof into metal strips according to the DSC method (direct strip casting) in a horizontal continuous casting system, the cast product (4) is deformed during the solidification thereof into the preliminary strip (5) due to uneven heat dissipation because the top of the strip is cooled only by convection of ambient air and by heat dissipation, while the bottom of said strip is in direct contact with a cooled metal conveyor belt (7). In this manner, the initially complete contact between the cast product (4) and the metal conveyor belt (7) is lost and the strip edges of the cast product arch upwards. In order to ensure in a simple manner maximum contact of the cast product (4) on the metal conveyor belt (7), thus optimizing and equalizing the heat transfer of the cast product (4) to the metal conveyor belt (7) across the entire casting width, the invention proposes that pressure be applied from above to the cast product (4) solidifying into the preliminary strip (5), preferably to the strip edges (6) thereof by means of a pressure device (11) disposed at the end of the metal conveyor belt (7) and, in order to compensate for the suddenly reduced cooling of the bottom of the preliminary strip upon leaving the metal conveyor belt (7), that the bottom of the preliminary strip be additionally cooled in a defined area directly behind the metal conveyor belt (7).

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