

Title (en)

METHOD FOR ESTABLISHING A LIKELIHOOD OF DEFECTS IN A CAST PRODUCT SECTION

Title (de)

VERFAHREN ZUR FESTSTELLUNG EINER DEFECTWAHRSCHEINLICHKEIT EINES GEGOSSENEN PRODUKTABSCHNITTES

Title (fr)

PROCÉDÉ D'ÉTABLISSEMENT D'UNE PROBABILITÉ DE DÉFAUTS DANS UNE SECTION DE PRODUIT COULÉ

Publication

**EP 4377028 A1 20240605 (DE)**

Application

**EP 22755213 A 20220727**

Priority

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Abstract (en)

[origin: WO2023006834A1] The present invention relates to the field of casting plants, preferably continuous casting plants for producing slabs. The problem addressed by the present invention is that of providing a method which allows quality-reducing defects to be detected before the cast product has left the casting plant. The problem is solved by a method for establishing a likelihood of defects in a cast product section (7a-7d). By means of a multi-stage product section calculation performed in real time, in a first calculation step at least changes in matrix phase proportions and an element concentration profile in phase regions are calculated in each case for a temperature-time step. The results of the first calculation step are fed to a second calculation step wherein, in the second calculation step, a change in precipitation proportions out of at least one phase region is determined for the subsequent temperature-time step. The results of the second calculation step are used as input variables for the first calculation step. The results of the product section calculation are used to determine at least one defect index.

IPC 8 full level

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