Title (en)

METHOD FOR CONTINUOUSLY CASTING DIFFERENT GRADES OF STEEL

Title (de)

VERFAHREN ZUM STRANGGIESSEN VON VERSCHIEDENEN STAHLQUALITÄTEN

Title (fr)

PROCÉDÉ POUR LA COULÉE CONTINUE DE DIFFÉRENTES QUALITÉS D'ACIER

Publication

EP 3088102 B1 20171108 (EN)

Application

EP 13900119 A 20131224

Priority

- KR 20130161155 A 20131223
- KR 2013012130 W 20131224

Abstract (en)

[origin: EP3088102A1] Provided is a method of continuous casting heterogeneous steels which includes the processes of obtaining dimensionless relative concentrations of subsequent steel to previous steel respectively at surface and inside of a continuous cast strand in real time, calculating positions in a longitudinal direction of the strand having the dimensionless relative concentrations at the surface and the inside obtained in real time, predicting a mixed portion in the strand by respectively comparing the obtained dimensionless relative concentrations of the surface and the inside with reference concentrations, and cutting off the predicted mixed portion. Thus, according to exemplary embodiments, the mixed portion is not cut to a predetermined length regardless of operating conditions during each operation of heterogeneous steels as in the related art, but the dimensionless concentrations of each of the surface and the center of the strand are obtained for each operation of heterogeneous steels, and positions of the strand having the obtained dimensionless concentrations are calculated to predict the position and the length of the mixed portion. Thus, since the accuracy of the prediction of the position and length of the mixed portion is improved, a decrease in profitability due to excessive cut-off of the mixed portion may be prevented and the shipment of defect products due to less cut-off of the mixed portion to client companies may be prevented.

IPC 8 full level

B22D 11/16 (2006.01); **B22D 11/00** (2006.01); **B22D 19/16** (2006.01)

CPC (source: EP KR)

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Citation (opposition)

Opponent : Primetals Technologies Austria GmbH

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DOCDB simple family (publication)

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