

Title (en)

METHOD AND APPARATUS FOR THE CONTINUOUS CASTING OF ALUMINIUM ALLOYS

Title (de)

VERFAHREN UND VORRICHTUNG ZUM STRANGGIESSEN VON ALUMINIUMLEGIERUNGEN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE COULÉE CONTINUE D'ALLIAGES D'ALUMINIUM

Publication

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Application

EP 11859793 A 20110411

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Abstract (en)

The invention relates to metallurgy and concerns the continuous and semicontinuous casting of metal, in particular aluminium. The apparatus comprises a crystallizer which is open at both ends in the casting direction, means for feeding a melt into the crystallizer, and two electromagnetic inductors. The inductors are mounted primarily symmetrically to each other relative to the vertical plane of symmetry of a billet. In order to induce a mixing motion in the melt, the inductors generate two electromagnetic fields running in opposite directions along the billet extraction direction. The area of action of the electromagnetic fields encloses the entire liquid core. This makes it possible to flexibly control the mixing speed, the flow structure and turbulization capacity along the entire liquid core of the crystallizing aluminium slab.

IPC 8 full level

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Cited by

CN106735104A; FR3074072A1; CN109311081A; CN106925762A; FR3074191A1; CN114786837A; WO2017207886A1; WO2019102111A1; US11925973B2; WO2019106254A1; WO2021127380A1

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