

Title (en)

Method of electromagnetically stirring molten steel in continuous casting.

Title (de)

Verfahren zum Elektromagnetischem Rühren von geschmolzenem Stahl beim Stranggiessen.

Title (fr)

Procédé de brassage électromagnétique d'acier fondu en coulée continue.

Publication

EP 0120153 A1 19841003 (EN)

Application

EP 83301618 A 19830323

Priority

EP 83301618 A 19830323

Abstract (en)

A method of electromagnetically stirring molten steel in continuous casting is disclosed wherein in producing cast slabs or blooms, an electromagnetic stirring force is applied to the unsolidified molten steel in the cast slab or bloom being drawn. An electromagnetic stirrer is installed between drawing positions where the unsolidified thickness is 45% and 15%, respectively, of the thickness as viewed in the direction of the thickness of the cast slab or bloom. Stirring in the casting direction is applied to the unsolidified molten steel in such a manner that the product of the magnetic flux density (gauss) at the interface between the unsolidified and solidified portions and the stirring time in minutes (which is defined as the ratio of the effective stirring length (in m) of the electromagnetic stirrer to the casting speed (in m/min) is 1,600 gauss-min or more per m³ of the total volume (m³) of unsolidified molten steel present in a region extending to the drawing side from the position where the electromagnetic stirrer is located.

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IPC 8 full level

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CPC (source: EP)

B22D 11/122 (2013.01)

Citation (search report)

- [A] DE 2731238 A1 19780126 - SIDERURGIE FSE INST RECH
- [A] DE 2424610 A1 19741212 - SIDERURGIE FSE INST RECH
- [A] GB 2073075 A 19811014 - KOBE STEEL LTD
- [A] US 3981345 A 19760921 - ALBERNY ROBERT, et al

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Designated contracting state (EPC)

AT DE FR GB IT

DOCDB simple family (publication)

EP 0120153 A1 19841003; **EP 0120153 B1 19870121**; AT E25015 T1 19870215; DE 3369258 D1 19870226

DOCDB simple family (application)

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