Title (en)

METHOD OF AND INSTALLATION FOR ELECTRO SLAG CONTINUOUS CASTING OF STEEL AND ALLOYS

Publication

EP 0280766 A3 19890222 (DE)

Application

EP 87114823 A 19871010

Priority

AT 46387 A 19870303

Abstract (en)

[origin: EP0280766A2] A method of continuously casting steel, in particular tool steel, from a heat-retention or distributor vessel into a mould from which the partly solidified billet is withdrawn continuously or gradually by means of a withdrawal device is to be improved by the liquid metal level being completely covered by overheated, electrically conductive liquid slag, by the slag additionally being heated and by the liquid steel being poured through the liquid slag, in the course of which the casting speed is set in such a way that it is at least 1.5 times the conventional remelting rates in electro-slag remelting and is at most 50 % of the conventional casting speed in continuous casting. Here, the layer thickness of the electrically conductive, liquid slag is to be at least 20 mm. The electrically conductive, liquid slag is heated by one or more non-consumable electrodes connected to a power supply and made, for example, of graphite, molybdenum, tungsten or other high-melting-point, electrically conductive materials.

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B22D 11/10; B22D 23/06

IPC 8 full level

B22D 11/11 (2006.01); C22B 9/18 (2006.01)

CPC (source: EP)

B22D 11/11 (2013.01); C22B 9/18 (2013.01)

Citation (search report)

- [A] DE 2941508 A1 19800430 NIPPON STEEL CORP
- [A] DE 2449812 A1 19750515 VOEST AG

Cited by

CN102089101A; CN102941323A; EP0786531A1; AT406384B; AT406239B; CN110548840A

Designated contracting state (EPC)

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