Title (en)

METHOD FOR REGULATING THE LEVEL OF THE CONTACT LINE OF THE FREE METAL SURFACE WITH THE INGOT MOULD IN A CONTINUOUS VERTICAL CASTING

Publication

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Application

EP 85904639 A 19850918

Priority

FR 8414740 A 19840919

Abstract (en)

[origin: US4807694A] In a continuous vertical casting operation carried out in a mould 3, a coil 7 applies a periodic magnetic field of variable strength whose direction is substantially parallel to the axis of the mould 3 to the liquid 5 as it solidifies, in order to regulate the level of the line of contact of the free surface of the metal 5 with the mould 3. The height of the contact of the metal with the mould can be reduced from h1 to h2 by applying the magnetic field, and the strength of the field is adjusted in dependence on the desired level. The procedure is used in casting semifinished metallurgical products, in particular in aluminium and its alloys, in which there is a wish to obtain a cortical region of zero thickness, a fine grain without the preliminary addition of refining agents, and an absence of pitting.

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IPC 8 full level

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