Title (en)

ELECTROMAGNETIC BRAKING DEVICE FOR A SMELTING METAL IN A CONTINUOUS CASTING INSTALLATION

Title (de)

EINRICHTUNG ZUM ELEKTROMAGNETISCHEN ABBREMSEN EINER METALSCHMELZE IN EINER STRANGGIESSANLAGE

Title (fr)

EQUIPEMENT DE FREINAGE ELECTROMAGNETIQUE D'UN METAL EN FUSION DANS UNE INSTALLATION DE COULEE CONTINUE

Publication

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Application

EP 98958286 A 19981201

Priority

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Abstract (en)

[origin: US6164365A] Both an apparatus and method are provided for electromagnetically braking a flow of molten metal during a continuous casting operation. The apparatus includes an electric electromagnetic inductor of the traveling-magnetic-field polyphase stator-type connected to a source of electrical power. The inductor is mounted on a casting plant opposite one face of the product being cast, and has two or three phase windings. The electrical power supply of the apparatus includes two or three elementary DC sources, each of which can be adjusted in terms of current intensity independent of one another. Each of the elementary electrical DC sources is connected to one, and only one of the phase windings of the inductor. The arrangement of the apparatus allows a flow of molten, ferromagnetic metal such as steel to be adjustably braked by merely adjusting the parameters of the source of electrical supply.

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