

Title (en)  
DEVICE FOR HOT DIP COATING METAL STRANDS

Title (de)  
VORRICHTUNG ZUR SCHMELZTAUCHBESCHICHTUNG VON METALLSTRÄNGEN

Title (fr)  
DISPOSITIF DE GALVANISATION A CHAUD DE CORDONS DE METAL

Publication  
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Application  
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Abstract (en)  
[origin: US7361224B2] The invention relates to a device for hot dip coating metal strands ( 1 ), particularly strip steel, in which the metal strand ( 1 ) can be vertically guided through a reservoir ( 3 ), which accommodates the molten coating metal ( 2 ), and through a guide channel ( 4 ) connected upstream therefrom. An electromagnetic inductor ( 5 ) is mounted in the area of the guide channel ( 4 ) and in order to retain the coating metal ( 2 ) inside the reservoir ( 3 ), can induce induction currents in the coating metal ( 2 ) by means of an electromagnetic blocking field. While interacting with the electromagnetic blocking field, said induction currents exert an electromagnetic force. In order to prevent an intense heating of the metal strand caused by the electromagnetic inductor, the invention provides that the inductor ( 5, 5 a , 5 b ) is connected to electric power supply means ( 6 ) that supply the inductor with an alternating current whose frequency ( f ) is less than 500 Hz. In particular, a mains frequency of 50 Hz is intended.

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