Title (en)

METHOD AND DEVICE FOR APPLYING A FILM TO A FLAT STEEL PRODUCT

Title (de)

VERFAHREN UND VORRICHTUNG ZUM AUFBRINGEN EINER SCHICHT AUF EIN STAHLFLACHPRODUKT

Title (fr)

PROCÉDÉ ET DISPOSITIF D'APPLICATION D'UNE COUCHE SUR UN PRODUIT PLAT EN ACIER

Publication

EP 4299784 A1 20240103 (DE)

Application

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Priority

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Abstract (en)

[origin: WO2024002813A1] The invention relates to a device (150) for applying a layer onto a flat steel product (100), comprising: - a molten zinc alloy bath (11) having an entry side (E) and an exit side (A); - an air-knife device (14) which comprises at least one knife-edge gap and which is located in the region of the exit side (A) in such a way that the layer which is still in liquid form on the flat steel product (100) can be blown off by means of gas exiting through the knife-edge gap. The device (150) is designed to carry out at least one of the following adjustments: - raising the bath temperature of the molten alloy bath (11) if the current local absolute humidity decreases, and vice versa, and/or - reducing the width of the knife-edge gap if the current local absolute humidity decreases, and vice versa, and/or - reducing the distance between the knife-edge gap and the side of the flat steel product (100) if the current local absolute humidity decreases, and vice versa, and - automatically adjusting the flow rate of the gas in order to keep the target thickness of the layer to be applied substantially constant.

IPC 8 full level

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Citation (applicant)

- WO 2014033153 A1 20140306 - VOESTALPINE STAHL GMBH [AT]
- EP 0172682 B1 19890201
- JP 2020100886 A 20200702 - NIPPON STEEL CORP
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Citation (search report)

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- [XAI] DE 1521405 A1 19690821 - NAT STEEL CORP
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- [A] DE 2709551 A1 19780907 - INLAND STEEL CO
- [A] WO 2014033153 A1 20140306 - VOESTALPINE STAHL GMBH [AT]

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