

Title (en)
METHOD AND DEVICE FOR AVOIDING SURFACE DEFECTS CAUSED BY ZINC DUST IN A CONTINUOUS STRIP GALVANISING PROCESS

Title (de)
VERFAHREN UND VORRICHTUNG ZUR VERMEIDUNG VON DURCH ZINKSTAUB VERURSACHTEN OBERFLÄCHENFEHLERN IN EINER KONTINUIERLICHEN BANDVERZINKUNG

Title (fr)
PROCÉDÉ ET DISPOSITIF SERVANT À ÉVITER LES DÉFAUTS DE SURFACE DUS À LA POUSSIÈRE DE ZINC DANS UNE INSTALLATION DE GALVANISATION DE FEUILLARDS EN CONTINU

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Application
EP 13735251 A 20130705

Priority
• DE 102012106106 A 20120706
• EP 2013064249 W 20130705

Abstract (en)
[origin: WO2014006183A1] The invention relates to a method and a device for avoiding surface defects caused by zinc dust on a galvanised metal strip in a continuous strip galvanising process, in which the metal strip to be galvanised, which is heated in a continuous heat treatment furnace, is moved through a furnace chute (1) under protective gas and is dipped into a zinc bath (3), said furnace chute being provided with blow openings by means of which a protective gas can be applied to the front side and the rear side of said metal strip, and extraction openings for extracting protective gas loaded with zinc vapour being arranged adjacent to said blow openings. The claimed device is characterised in that a plurality of the blow openings (7.11) are designed and arranged in the furnace chute (1) in such a manner that protective gas flowing out of these blow openings is directed to the surface of the metal strip (2) facing the respective blow opening (7.11) at an angle of incidence in the range of 70° to 110°, and the distance between the blow opening (7.11) in question and at least one extraction opening (7.21) associated therewith being selected such that, at a predefined or predefinable flow speed of the protective gas leaving the respective blow opening, the problem of protective gas being carried along in the direction of the zinc bath (3), which occurs as the metal strip moves, is counteracted.

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Citation (opposition)
Opponent : ArcelorMittal
• JP H11302811 A 19991102 - NIPPON STEEL CORP
• KR 20030049330 A 20030625 - POSCO [KR]
• JP H07157853 A 19950620 - NIPPON STEEL CORP
• JP H09228016 A 19970902 - KAWASAKI STEEL CO
• JP H07316760 A 19951205 - NISSHIN STEEL CO LTD

Cited by
DE102017106678A1; DE202017101798U1

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