

Title (en)

METHOD FOR PRODUCING A COATED METAL STRIP WITH AN IMPROVED APPEARANCE

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES BESCHICHTETEN METALLSTREIFENS MIT VERBESSERTEM AUSSEHEN

Title (fr)

PROCEDE DE FABRICATION D'UNE BANDE METALLIQUE REVETUE PRESENTANT UN ASPECT AMELIORE

Publication

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Application

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Abstract (en)

[origin: WO2010130884A1] The invention relates to a method for producing a metal band with a metal coating that provides protection against corrosion, comprising the following steps consisting in: passing the metal band through a molten metal bath; drying the coated metal band using nozzles spraying a gas on either side of the band, said gas having an oxidising potential lower than that of an atmosphere comprising 4 vol.-% oxygen and 96 vol.-% nitrogen; and passing the band through a containment area defined (a) at the bottom by the drying line and the upper faces of the drying nozzles, (b) at the top by the upper portion of two containment casings placed on either side of the band just above the nozzles and having a height of at least 10 cm in relation to the drying line and (c) at the sides by the side portions of said containment casings. The atmosphere in the containment area has an oxidising potential less than that of an atmosphere containing 4 vol.-% oxygen and 96 vol.% nitrogen and greater than that of an atmosphere containing 0.15 vol.-% oxygen and 99.85 vol.-% nitrogen. The invention also relates to a coating installation and to a contained drying device (10; 20; 30) for implementing said method.

IPC 8 full level

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UA 108611 C2 20150525; US 10724130 B2 20200728; US 11098396 B2 20210824; US 11597990 B2 20230307; US 2012052206 A1 20120301;
US 2018291493 A1 20181011; US 2020248295 A1 20200806; US 2021269907 A1 20210902; US 2023183847 A1 20230615;
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JP 2012510330 A 20100511; KR 20117029980 A 20100511; KR 20147010073 A 20100511; MA 34350 A 20111114;
MX 2011012004 A 20100511; PL 10726150 T 20100511; RU 2011150820 A 20100511; UA A201114767 A 20100511;
US 201013121833 A 20100511; US 201816004131 A 20180608; US 202016856232 A 20200423; US 202117323235 A 20210518;
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