

Title (en)

MOLTEN METAL PLATED STEEL SHEET PRODUCTION METHOD AND APPARATUS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG EINES MIT SCHMELZFLÜSSIGEM METALL BESCHICHTETEN STAHLBLECHS

Title (fr)

PROCEDE ET APPAREIL DE PRODUCTION DE TOLE D'ACIER PLAQUEE DE METAL EN FUSION

Publication

EP 1516939 A1 20050323 (EN)

Application

EP 03738502 A 20030623

Priority

- JP 0307924 W 20030623
- JP 2002187519 A 20020627

Abstract (en)

The invention provides a method for producing hot-dip metal coated steel sheet, comprising the steps of: continuously immersing a steel sheet in a hot-dip metal coating bath to adhere the molten metal of the bath onto a surface of the steel sheet; changing the running direction of the steel sheet using a direction-changing device located in the hot-dip metal coating bath, and then drawing up thereof from the bath; adjusting the coating weight of the molten metal adhered to the steel sheet using a gas-wiping device; and correcting the warp appeared on the steel sheet in non-contact state by the magnetic force using electromagnets which are positioned at upstream side and/or downstream side of the gas-wiping device and which apply the magnetic force to the steel sheet in the direction crossing the surface thereof. The current value of the electromagnet is set to a current value preliminarily determined on the basis of information relating to the steel sheet. The method allows producing a hot-dip metal coated steel sheet which suppresses the generation of warp over the whole length of the steel sheet, gives uniform coating weight, and provides excellent surface property. <IMAGE>

IPC 1-7

C23C 2/00

IPC 8 full level

C23C 2/00 (2006.01); **C23C 2/06** (2006.01); **C23C 2/14** (2006.01); **C23C 2/20** (2006.01); **C23C 2/24** (2006.01); **C23C 2/40** (2006.01)

CPC (source: EP KR US)

C23C 2/00 (2013.01 - EP US); **C23C 2/00344** (2022.08 - EP KR US); **C23C 2/06** (2013.01 - KR); **C23C 2/20** (2013.01 - EP KR); **C23C 2/24** (2013.01 - EP KR); **C23C 2/40** (2013.01 - KR); **C23C 2/51** (2022.08 - EP KR US); **C23C 2/524** (2022.08 - EP KR US)

Cited by

IT202000016012A1; FR2887707A1; EP2848711A4; US2022049339A1; EP1896625A4; EP1918410A3; US10343867B2; WO2022003646A1; WO2006136700A1; DE10201622224A1; WO2017144194A1; US10982307B2

Designated contracting state (EPC)

DE

DOCDB simple family (publication)

EP 1516939 A1 20050323; CN 1659301 A 20050824; JP 2004027315 A 20040129; KR 100758240 B1 20070912; KR 20050014836 A 20050207; WO 2004003249 A1 20040108

DOCDB simple family (application)

EP 03738502 A 20030623; CN 03813569 A 20030623; JP 0307924 W 20030623; JP 2002187519 A 20020627; KR 20047019072 A 20030623