

Title (en)

METHOD AND DEVICE FOR PRODUCING COATED METAL STRANDS, ESPECIALLY STEEL STRIPS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG VON BESCHICHTETEN STRÄNGEN AUS METALL, INSBESONDERE VON BÄNDERN AUS STAHL

Title (fr)

PROCEDE ET DISPOSITIF POUR PRODUIRE DES BANDES DE METAL, NOTAMMENT DES FEUILLARDS D'ACIER, MUNIES D'UN REVETEMENT

Publication

EP 1144705 A3 20021113 (DE)

Application

EP 00901068 A 20000107

Priority

- DE 19902066 A 19990120
- EP 0000060 W 20000107

Abstract (en)

[origin: US6565925B1] A method for producing coated strands of metal includes guiding a metal strand through the bottom of a vessel filled with a molten mass of the same or different composition as the metal strip, wherein the residence time of the metal strand is selected as a function of at least one of the molten bath level, the casting speed, the metal strand thickness, and the preheating temperature of the metal strand such that the deposited molten mass on the metal strand has a desired thickness of several times the initial thickness of the metal strand. After exiting from the molten bath, the metal strand with a layer crystallized thereon is subjected to a smoothing path carried out when the surface temperature of the strand crystallized thereon is smaller than the solidus temperature of the molten bath, so that at least the surface of the layer crystallized thereon is solidified. The crystallized layer is applied with a thickness which exceeds the desired final thickness of the coated strand. Between the molten bath and the beginning of the solidification while still in the doughy state of crystallization, stripping of the crystallized layer is carried out to a controlled uniform smaller thickness over the length of the strand.

IPC 1-7

C23C 2/00

IPC 8 full level

B22D 11/00 (2006.01); **C23C 2/00** (2006.01)

CPC (source: EP US)

B22D 11/008 (2013.01 - EP US); **C23C 2/0035** (2022.08 - EP US); **C23C 2/00361** (2022.08 - EP US); **C23C 2/50** (2022.08 - EP US)

Citation (search report)

See references of WO 0043563A2

Designated contracting state (EPC)

AT DE IT

DOCDB simple family (publication)

US 6565925 B1 20030520; AT E219160 T1 20020615; AU 2106200 A 20000807; DE 19902066 A1 20000803; DE 50000212 D1 20020718; EP 1144705 A2 20011017; EP 1144705 A3 20021113; EP 1144705 B1 20020612; WO 0043563 A2 20000727; WO 0043563 A3 20020926

DOCDB simple family (application)

US 88952101 A 20010718; AT 00901068 T 20000107; AU 2106200 A 20000107; DE 19902066 A 19990120; DE 50000212 T 20000107; EP 0000060 W 20000107; EP 00901068 A 20000107