

Title (en)

APPARATUS FOR COATING THE SURFACE OF STEEL STRIP

Title (de)

VORRICHTUNG ZUM BESCHICHTEN DER OBERFLÄCHE VON STAHLBAND

Title (fr)

DISPOSITIF POUR REVETIR LA SURFACE D'UNE BANDE D'ACIER

Publication

**EP 0630421 B1 19970514 (DE)**

Application

**EP 93905164 A 19930304**

Priority

- DE 9300207 W 19930304
- DE 4208578 A 19920313

Abstract (en)

[origin: WO9318198A1] In a process for coating the surface of elongated materials, the materials go through a container for the molten coating material without reversing their direction. The container has a through channel surrounded by an electric field in which an electromagnetic force is generated and the dwelling time of the strip in the melt can be controlled independently from the strip advance speed. In order to improve the conventional strip coating process, so that favourable intermediate layers that ensure a good adherence and a good plasticity of the coating can be achieved, the molten coating material is continuously moved against the surface of the elongated material and is circulated in an atmosphere free from atmospheric oxygen while the hank-shaped goods go through the container. A device used therefor is characterized in that a pre-melting container (12) is associated to the coating container for the molten coating material (2), and that the melt (2) can circulate between the pre-melting container (12) and the coating container (1) in an atmosphere free from atmospheric oxygen.

IPC 1-7

**C23C 2/36; C23C 2/38; C23C 2/00**

IPC 8 full level

**C23C 2/00** (2006.01); **C23C 2/36** (2006.01); **C23C 2/38** (2006.01); **C23C 2/40** (2006.01)

CPC (source: EP US)

**C23C 2/00342** (2022.08 - EP US); **C23C 2/0035** (2022.08 - EP US); **C23C 2/00362** (2022.08 - EP US); **C23C 2/004** (2022.08 - EP US); **C23C 2/38** (2013.01 - EP US); **C23C 2/50** (2022.08 - EP US)

Cited by

AU2006263996B2; EA012097B1; US7946245B2; DE102008006909A1; WO2007000277A1

Designated contracting state (EPC)

AT BE DE ES FR GB IT LU NL SE

DOCDB simple family (publication)

**WO 9318198 A1 19930916**; AT E153080 T1 19970515; AU 3625693 A 19931005; AU 674303 B2 19961219; BR 9306075 A 19980113; CA 2131912 A1 19930916; CA 2131912 C 20040113; DE 4208578 A1 19930916; DE 59306458 D1 19970619; EP 0630421 A1 19941228; EP 0630421 B1 19970514; ES 2101303 T3 19970701; FI 100890 B 19980313; FI 944194 A0 19940912; FI 944194 A 19940912; JP 2814306 B2 19981022; JP H07509277 A 19951012; KR 100276043 B1 20001215; RU 2093602 C1 19971020; RU 94041744 A 19970527; US 5702528 A 19971230

DOCDB simple family (application)

**DE 9300207 W 19930304**; AT 93905164 T 19930304; AU 3625693 A 19930304; BR 9306075 A 19930304; CA 2131912 A 19930304; DE 4208578 A 19920313; DE 59306458 T 19930304; EP 93905164 A 19930304; ES 93905164 T 19930304; FI 944194 A 19940912; JP 51524393 A 19930304; KR 19940703208 A 19940913; RU 94041744 A 19930304; US 56787795 A 19951206