

Title (en)  
DEVICE FOR HOT-DIP COATING A METAL STRIP

Title (de)  
VORRICHTUNG ZUM SCHMELZTAUCHBESCHICHTEN VON METALLBAND

Title (fr)  
DISPOSITIF DE REVÊTEMENT D'UNE BANDE MÉTALLIQUE PAR IMMERSION À CHAUD

Publication  
**EP 2954085 B1 20190102 (DE)**

Application  
**EP 14705302 A 20140204**

Priority  
• DE 102013101131 A 20130205  
• EP 2014052148 W 20140204

Abstract (en)  
[origin: WO2014122128A1] The invention relates to a device for hot-dip coating a metal strip, comprising a molten bath vessel (4), a pipe (6) which opens into the molten bath vessel for introducing a metal strip that has been heated in a continuous furnace (1) into said molten bath and a deflection roller (7) arranged in the molten bath for deflecting the metal strip (1) entering the molten bath in a direction leading out of said molten bath. According to the invention, the pipe (6) is provided with a chute-type pipe extension piece (6.1) for increasing the submersion depth of the pipe and the inner width of the pipe extension piece (6.1) tapers towards the outlet opening of the piece (6.15), at least over part of the length of said piece. This increases or maximises the turbulent flow in the melt on or in the vicinity of the metal strip (1), thus achieving the improved homogenisation of the melt in the region of the strip and thereby allowing the prevention of slag-related surface defects on the surface of the coated metal strip (1).

IPC 8 full level  
**C23C 2/00** (2006.01); **C23C 2/40** (2006.01)

CPC (source: EP US)  
**C23C 2/0034** (2022.08 - EP US); **C23C 2/00344** (2022.08 - EP US); **C23C 2/004** (2022.08 - EP US); **C23C 2/06** (2013.01 - US); **C23C 2/12** (2013.01 - US); **C23C 2/38** (2013.01 - US); **C23C 2/40** (2013.01 - EP US); **B05C 3/125** (2013.01 - US); **B05C 11/06** (2013.01 - US); **B05D 1/18** (2013.01 - US); **Y10S 118/19** (2013.01 - EP US)

Citation (examination)  
DE 697644 C 19401018 - HOESCH AG

Cited by  
EP3872201A1; DE102020105375A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**DE 102013101131 A1 20140807**; EP 2954085 A1 20151216; EP 2954085 B1 20190102; ES 2715857 T3 20190606; US 2015368776 A1 20151224; US 9453275 B2 20160927; WO 2014122128 A1 20140814; WO 2014122128 A9 20150924

DOCDB simple family (application)  
**DE 102013101131 A 20130205**; EP 14705302 A 20140204; EP 2014052148 W 20140204; ES 14705302 T 20140204; US 201414765691 A 20140204