

Title (en)  
Method for manufacturing a flat steel product having a protective metal coating produced by means of hot-dip coating and continuous furnace for a hot-dip coating system

Title (de)  
Verfahren zur Herstellung eines durch Schmelztauchbeschichten mit einer metallischen Schutzschicht versehenen Stahlflachprodukts und Durchlaufofen für eine Schmelztauchbeschichtungsanlage

Title (fr)  
Procédé de fabrication d'un produit en acier plat pourvu, par revêtement par galvanisation à chaud, d'une couche de protection métallique et four à passage continu pour une installation de revêtement par galvanisation à chaud

Publication  
**EP 2824216 B1 20190515 (DE)**

Application  
**EP 14162799 A 20140331**

Priority  
DE 102013105378 A 20130524

IPC 8 full level  
**C23C 28/00** (2006.01); **C21D 1/70** (2006.01); **C21D 1/74** (2006.01); **C21D 6/00** (2006.01); **C21D 9/56** (2006.01); **C23C 2/02** (2006.01); **C23C 2/40** (2006.01); **C23C 8/18** (2006.01); **C23C 8/80** (2006.01); **F27B 9/28** (2006.01); **F27B 9/36** (2006.01); **F27D 99/00** (2010.01)

CPC (source: EP US)  
**C21D 1/70** (2013.01 - EP); **C21D 1/74** (2013.01 - EP); **C21D 6/005** (2013.01 - EP); **C21D 9/561** (2013.01 - EP); **C23C 2/0038** (2022.08 - EP US); **C23C 2/0222** (2022.08 - EP US); **C23C 2/0224** (2022.08 - EP US); **C23C 2/40** (2013.01 - EP); **C23C 8/18** (2013.01 - EP); **C23C 8/80** (2013.01 - EP); **C23C 28/321** (2013.01 - EP); **C23C 28/345** (2013.01 - EP); **F27B 9/28** (2013.01 - EP); **F27B 9/36** (2013.01 - EP); **F27D 99/0033** (2013.01 - EP); **C21D 8/0478** (2013.01 - EP)

Cited by  
CN111549307A; CN106929659A; IT202000013285A1; WO2021245716A1; US10526677B2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ 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 102013105378 B3 20140828**; EP 2824216 A1 20150114; EP 2824216 B1 20190515; ES 2738118 T3 20200120

DOCDB simple family (application)  
**DE 102013105378 A 20130524**; EP 14162799 A 20140331; ES 14162799 T 20140331