

Title (en)

METHOD FOR OPERATING A CONTINUOUS ANNEALING OR GALVANISATION LINE FOR A METAL STRIP

Title (de)

VERFAHREN ZUM BETREIBEN EINER DURCHGEHENDEN GLÜH- ODER GALVANISIERUNGSLEITUNG FÜR EINEN METALLSTREIFEN

Title (fr)

PROCEDE DE MISE EN UVRE D'UNE LIGNE DE RECUIT OU DE GALVANISATION EN CONTINU D'UNE BANDE METALLIQUE

Publication

**EP 2181198 B1 20180905 (FR)**

Application

**EP 08828389 A 20080704**

Priority

- FR 2008000982 W 20080704
- FR 0757297 A 20070831

Abstract (en)

[origin: WO2009027593A1] The invention relates to a method for operating a continuous annealing or galvanisation line for a metal strip, comprising a section for heating by direct flame (9) with an upstream zone (10) and a downstream zone (11), the section for heating by direct flame (9) being followed by a section for heating by radiant tubes, the metal strip being indirectly heated in the section for heating by direct flame (9). According to the invention, the heating of the metal strip is achieved in the upstream zone (10) by combustion of a mixture of atmospheric air and fuel such that the temperature of the combustion gas is between 1250°C and 1500°C, preferably close to 1350°C and in the downstream zone(11), the heating of the metal strip is achieved by combustion of a superoxygenated sub-stoichiometric mixture of air and fuel such that the temperature of the combustion gas achieved at the end of the upstream zone (10) is maintained until the end of the downstream zone (11) of the section for heating by direct flame (9).

IPC 8 full level

**C21D 1/52** (2006.01); **C21D 1/76** (2006.01); **C21D 9/56** (2006.01)

CPC (source: EP US)

**C21D 1/52** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

**FR 2920438 A1 20090306; FR 2920438 B1 20101105;** CN 102057062 A 20110511; CN 102057062 B 20140716; EP 2181198 A1 20100505;  
EP 2181198 B1 20180905; US 2011053107 A1 20110303; US 8568137 B2 20131029; WO 2009027593 A1 20090305

DOCDB simple family (application)

**FR 0757297 A 20070831;** CN 200880104669 A 20080704; EP 08828389 A 20080704; FR 2008000982 W 20080704; US 67382208 A 20080704