

Title (en)

Method of galvanising a steel strip in a continuous hot dip galvanising line

Title (de)

Verfahren zum Verzinken eines Stahlstreifens in einer kontinuierlichen Feuerverzinkungsanlage

Title (fr)

Procédé de galvanisation de bande d'acier dans une ligne de galvanisation à chaud en continu

Publication

EP 2458022 B2 20240117 (EN)

Application

EP 10193219 A 20101130

Priority

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Abstract (en)

[origin: EP2458022A1] Method of galvanizing a steel strip in a continuous hot dip galvanizing line comprising a direct fired furnace section or non-oxidising furnace and a subsequent radiant tube furnace section, the method comprising injecting a gas mixture of nitrogen and air or a gas mixture of nitrogen and oxygen into the galvanizing furnace by a nozzle system to cause one or both of the steel strip surfaces to oxidise in a controlled manner 1. in the direct fired furnace section or non-oxidising furnace, wherein the direct fired furnace section is operated in a substantially non-oxidising manner or in the connection chamber between the direct fired furnace section or non-oxidising section and radiant tube section and 2. before the radiant tube section, the method further comprising at least partly reducing the oxide back to iron in the radiant tube furnace section and the method further comprising hot dip galvanizing the steel strip in the hot dip galvanizing line, wherein the gas mixture comprises an oxygen content of 0.5 to 10%.

IPC 8 full level

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C23C 2/02 (2006.01)

CPC (source: EP US)

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C23C 2/0222 (2022.08 - EP US); **C21D 1/70** (2013.01 - EP); **C21D 1/76** (2013.01 - EP)

Cited by

IT202000013879A1; WO2016177590A1; EP3173495A1; CN107532227A; EA032952B1; CN115612974A; WO2019011519A1; WO2019096616A1;
WO2021250517A1; WO2020089336A1; US11193196B2; EP3686534B1

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