

Title (en)
CONTROLLED METHOD AND DEVICE FOR OXIDATION/REDUCTION OF THE SURFACE OF A STEEL STRIP RUNNING CONTINUOUSLY THROUGH A RADIANT TUBE OVEN FOR GALVANISATION THEREOF

Title (de)
GESTEUERTES VERFAHREN UND VORRICHTUNG ZUR OXIDATION/OBERFLÄCHENREDUKTION EINES KONTINUIERLICH DURCH EINEN STRAHLUNGSRÖHR-GALVANISIERUNGSOFFEN LAUFENDEN STAHLSTREIFENS

Title (fr)
PROCEDE ET DISPOSITIF D'OXYDATION/REDUCTION CONTROLEE DE LA SURFACE D'UNE BANDE D'ACIER EN DEFILEMENT CONTINU DANS UN FOUR A TUBES RADIANTS EN VUE DE SA GALVANISATION

Publication
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Application
EP 08829848 A 20080704

Priority

- FR 2008000981 W 20080704
- FR 0757331 A 20070903

Abstract (en)
[origin: WO2009030823A1] The invention particularly relates to a method for guaranteeing the oxidation of a strip designed to prevent the selective oxidation of alloy elements of the steel in a continuous steel strip galvanising annealing furnace having a pre-heating section and a hold section and provided only with radiant tubes, the oxidation of the strip being designed to prevent the selective oxidation of elements of the steel alloy, characterised in comprising the following steps: installation of at least one modified tube capable of injecting an oxidising medium at at least one point in the oven heating section and/or at at least one point in the hold section and injection of the oxidising medium by means of the modified tube(s), the oxidising medium having a composition such that in the conditions of the temperature of the oxidising medium and the steel strip and as a function of the chemical composition of the strip said medium has a dew point which guarantees an in-depth oxidation of the alloy elements of the steel strip.

IPC 8 full level
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CPC (source: EP US)
C21D 1/76 (2013.01 - EP US); **C21D 9/0006** (2013.01 - EP US); **C21D 9/48** (2013.01 - EP US); **C21D 9/52** (2013.01 - EP US); **C21D 9/561** (2013.01 - EP US); **C23C 2/28** (2013.01 - EP US); **C23C 2/29** (2022.08 - EP US); **F27B 9/068** (2013.01 - EP US); **F27B 9/28** (2013.01 - EP US)

Citation (opposition)
Opponent :

- EP 1936000 A1 20080625 - NIPPON STEEL CORP [JP]
- JP S58214712 A 19831214 - DAIDO STEEL CO LTD
- US 6902829 B2 20050607 - PRADHAN RAJENDRA [US], et al
- Traduction française de JP S58214712A
- "Radiant tube technology for strip line furnaces", A.Milani et al., IFRF Combustion Journal, Article number 200405, Novembre 2004

Cited by
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DOCDB simple family (publication)
FR 2920439 A1 20090306; **FR 2920439 B1 20091113**; CN 101796203 A 20100804; CN 101796203 B 20111214; EP 2188399 A1 20100526; EP 2188399 B1 20130828; EP 2188399 B2 20230503; JP 2010538163 A 20101209; US 2010173072 A1 20100708; US 8609192 B2 20131217; WO 2009030823 A1 20090312

DOCDB simple family (application)
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