

Title (en)
METHOD FOR CONTROLLING A PROTECTIVE GAS ATMOSPHERE IN A PROTECTIVE GAS CHAMBER FOR THE TREATMENT OF A METAL STRIP

Title (de)
VERFAHREN ZUM KONTROLLIEREN EINER SCHUTZGASATMOSPHERE IN EINER SCHUTZGASKAMMER ZUR BEHANDLUNG EINES METALLBANDES

Title (fr)
PROCÉDÉ POUR LE CONTRÔLE D'UNE ATMOSPHERE DE GAZ DE PROTECTION DANS UNE CHAMBRE DE GAZ DE PROTECTION POUR LE TRAITEMENT D'UNE BANDE MÉTALLIQUE

Publication
EP 2671035 B1 20141203 (DE)

Application
EP 12715806 A 20120130

Priority
• AT 1522011 A 20110204
• AT 2012000013 W 20120130

Abstract (en)
[origin: WO2012103563A1] The subject matter of said invention is formed by a method for controlling the atmosphere in a protective gas chamber (2) for the continuous treatment of metal strips (3). Here, the metal strip (3) is guided into and out of the protective gas chamber (2) via locks (4). At least one lock (4) has at least two sealing elements (5, 6) for the metal strip (3) which runs through it, with the result that a sealed chamber (7) is formed between the two sealing elements (5, 6). According to the invention, the gas pressure (P2, PD) is measured in the protective gas chamber (2) and in the sealed chamber (7) of the lock (4) and the pressure (PD) in the sealed chamber (7) is regulated, to be precise in such a way that, during operation, the differential pressure between the protective gas chamber (2) and the sealed chamber (7) is kept as far as possible to an optimum value.

IPC 8 full level
F27B 9/28 (2006.01); **C21D 1/74** (2006.01); **C21D 9/56** (2006.01); **F26B 21/00** (2006.01); **F27B 9/40** (2006.01)

CPC (source: EP KR US)
C21D 9/56 (2013.01 - KR); **C21D 9/561** (2013.01 - EP US); **C21D 9/565** (2013.01 - EP US); **F26B 21/003** (2013.01 - US); **F27B 9/28** (2013.01 - EP KR US); **F27B 9/40** (2013.01 - EP KR US); **C21D 1/74** (2013.01 - EP US)

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)
WO 2012103563 A1 20120809; AT 511034 A1 20120815; AT 511034 B1 20130115; BR 112013019485 A2 20191105; BR 112013019485 B1 20210309; CA 2825855 A1 20120809; CA 2825855 C 20180501; CN 103380346 A 20131030; CN 103380346 B 20150805; EP 2671035 A1 20131211; EP 2671035 B1 20141203; ES 2531482 T3 20150316; JP 2014505795 A 20140306; JP 6061400 B2 20170118; KR 101807344 B1 20171208; KR 20140022003 A 20140221; PL 2671035 T3 20150430; RU 2013138601 A 20150310; RU 2592653 C2 20160727; US 2013305559 A1 20131121; US 8893402 B2 20141125; ZA 201306439 B 20141029

DOCDB simple family (application)
AT 2012000013 W 20120130; AT 1522011 A 20110204; BR 112013019485 A 20120130; CA 2825855 A 20120130; CN 201280007304 A 20120130; EP 12715806 A 20120130; ES 12715806 T 20120130; JP 2013552060 A 20120130; KR 20137022825 A 20120130; PL 12715806 T 20120130; RU 2013138601 A 20120130; US 201213982348 A 20120130; ZA 201306439 A 20130827