

Title (en)

METHOD AND DEVICE FOR CONTROLLING AN ATMOSPHERIC BOILER WITH AN AIR TIGHT COMBUSTION CHAMBER

Title (de)

VERFAHREN UND VORRICHTUNG ZUR STEUERUNG EINES ATMOSPHÄRISCHEN KESSELS MIT LUFTDICHTER BRENNKAMMER

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR COMMANDER UNE CHAUDIÈRE ATMOSPHÉRIQUE COMPORANT UNE CHAMBRE DE COMBUSTION ÉTANCHE À L'AIR

Publication

**EP 2550483 A1 20130130 (EN)**

Application

**EP 10718298 A 20100324**

Priority

IT 2010000126 W 20100324

Abstract (en)

[origin: WO2011117896A1] A control method of a boiler provided with atmospheric burner comprises a valve for controlling the gas sent to a burner (14), means (10) for detecting the flame present in the latter and control means (13) of functional components of the boiler such as the gas valve (15), a fan, provided with its own electric motor, a circulator or pump, a temperature probe, said control means (13) co-operating with a memory (12) wherein a plurality of optimum operating conditions of the boiler is tabulated functions of features related to the flame, to the thermal power and to the value lambda. The working point of the boiler is determined on one of such curves, the ratio between combustion air and gas is modified starting from a current operating value, in order to shift such working point along such curve, it is verified if such variation of the ratio arrives at a predefined value and in that case a previous air-gas ratio of correct operation is reset, in the opposite case the gas flow rate being modified in order to obtain an optimum combustion ratio. Protection is also claimed for a device for accomplishing such method.

IPC 8 full level

**F23D 14/60** (2006.01); **F23N 1/02** (2006.01); **F23N 1/08** (2006.01); **F23N 5/00** (2006.01); **F23N 5/12** (2006.01)

CPC (source: EP)

**F23D 14/60** (2013.01); **F23N 1/022** (2013.01); **F23N 1/082** (2013.01); **F23N 5/006** (2013.01); **F23N 5/123** (2013.01); **F23N 1/02** (2013.01);  
**F23N 1/08** (2013.01); **F23N 5/12** (2013.01); **F23N 2225/19** (2020.01); **F23N 2225/30** (2020.01); **F23N 2229/00** (2020.01)

Citation (search report)

See references of WO 2011117896A1

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 MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**WO 2011117896 A1 20110929**; CN 102869923 A 20130109; CN 102869923 B 20160127; EA 024861 B1 20161031; EA 201290946 A1 20130830;  
EP 2550483 A1 20130130; EP 2550483 B1 20180307; ES 2667045 T3 20180509; PL 2550483 T3 20180831

DOCDB simple family (application)

**IT 2010000126 W 20100324**; CN 201080065708 A 20100324; EA 201290946 A 20100324; EP 10718298 A 20100324; ES 10718298 T 20100324;  
PL 10718298 T 20100324