Title (en)

METHOD AND DEVICE FOR AUTOMATIC REGULATION OF OPTIMAL CONDITIONS OF BIOMASS COMBUSTION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR AUTOMATISCHEN REGELUNG VON OPTIMALEN BEDINGUNGEN EINER BIOMASSEVERBRENNUNG

Title (fr)

PROCÉDÉ ET DISPOSITIF DE RÉGULATION AUTOMATIQUE DES CONDITIONS DE COMBUSTION OPTIMALES DE LA BIOMASSE

Publication

EP 2870411 A2 20150513 (EN)

Application

EP 13789400 A 20130709

Priority

- SI 201200229 A 20120709
- SI 2013000043 W 20130709

Abstract (en)

[origin: WO2014011121A2] The technical problem solved by the present invention is regulation of a flow of exhaust gases with the purpose of increasing the efficiency of a biomass powered stove and ensuring optimal combustion conditions. The object of the invention is a method for an automatic regulation of optimal conditions of biomass combustion that following an internal algorithm adequately evaluates data from a temperature sensor of exhaust gases and a draught sensor, and by means of a processor and a user interface sends commands to control electronics for a fan and to control electronic of a mechanical actuator for movement of a shutter. This creates conditions for a rapid cool startup under consideration of various influential burning factors, it allows maintenance of operating temperature by reducing the rate of exhaust gases and an autonomous way of supply of the regulation and control system. The constructional solution of the device of the invention is designed in modules, wherein the device has a fume shutter of a typical shape, an electronic control circuit, a control electronic regulator, sensors of exhaust gas status, mechatronic actuators and a power unit with a safety function of shutter opening in the case of electricity failure and is controlled by a computer designed intelligent system.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2014011121A2

Citation (examination)

- US 5988589 A 19991123 - MOWILL R JAN [NL]
- US 540049 A 18950528
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WO2017144614A1

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