

Title (en)

GAS WATER HEATER AND SECURITY CONTROL SYSTEM AND METHOD THEREFOR

Title (de)

GASWASSERERHITZER UND SICHERHEITSSTEUERUNGSVERFAHREN UND -SYSTEM DAFÜR

Title (fr)

CHAUFFE-EAU AU GAZ ET SYSTÈME ET PROCÉDÉ DE COMMANDE DE SÉCURITÉ S'Y RAPPORTANT

Publication

EP 3309473 B1 20190925 (EN)

Application

EP 16869367 A 20161230

Priority

- CN 201610795349 A 20160831
- CN 2016113788 W 20161230

Abstract (en)

[origin: EP3309473A1] Embodiments of the present invention provide a gas water heater and a safety control method and system for the same. The system includes: an exhaust fan; a rotational speed detecting unit, configured to detect a rotational speed of the exhaust fan; a power obtaining unit, configured to obtain a set value for output power of the exhaust fan; a rotational speed difference obtaining unit, configured to obtain an actual value of the rotational speed and a reference value of the rotational speed according to the set value for the output power, and to calculate a difference between the actual value of the rotational speed and the reference value of the rotational speed; and an exhaust control unit, connected to the exhaust fan, the rotational speed detecting unit and the power obtaining unit respectively, and configured to correct the rotational speed of the exhaust fan according to the difference, to determine a wind pressure situation at an air outlet of the exhaust fan according to corrected rotational speed and the set value for the output power, and to adjust the set value for the output power according to the wind pressure situation. The system can ensure that the gas water heater has a good combustion condition and can ensure that the gas water heater operates safely and reliably, and can improve the control accuracy.

IPC 8 full level

F24H 9/20 (2006.01); **F23N 3/08** (2006.01)

CPC (source: CN EP US)

F23N 3/082 (2013.01 - EP); **F24H 9/2035** (2013.01 - CN EP US); **F24H 15/174** (2022.01 - CN EP US); **F24H 15/20** (2022.01 - CN EP US); **F24H 15/215** (2022.01 - CN EP US); **F24H 15/219** (2022.01 - CN EP US); **F24H 15/242** (2022.01 - CN EP US); **F24H 15/31** (2022.01 - CN EP US); **F24H 15/35** (2022.01 - CN EP US)

Cited by

CN114183770A

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)

EP 3309473 A1 20180418; **EP 3309473 A4 20180418**; **EP 3309473 B1 20190925**; CN 106403300 A 20170215; CN 106403300 B 20200428; WO 2018040446 A1 20180308

DOCDB simple family (application)

EP 16869367 A 20161230; CN 201610795349 A 20160831; CN 2016113788 W 20161230