

Title (en)
METHOD FOR OPERATING A FAN ASSISTED, ATMOSPHERIC GAS BURNER APPLIANCE

Title (de)
VERFAHREN ZUM BETREIBEN EINER MISCHROHRBRENNERANWENDUNG MIT GEBLÄSE

Title (fr)
PROCÉDÉ DE FONCTIONNEMENT D'UN BRÛLEUR DE GAZ ATMOSPHÉRIQUE ASSISTÉ PAR VENTILATEUR

Publication
EP 3327351 A1 20180530 (EN)

Application
EP 16200264 A 20161123

Priority
EP 16200264 A 20161123

Abstract (en)
Method for operating a fan assisted, atmospheric gas burner appliance (10), wherein said gas burner appliance (10) comprises a burner chamber (11) in which a gas/air mixture can be combusted, a heat exchanger (12) for heating water by combusting said gas/air mixture, an air pipe (15) or air duct for providing the air of the gas/air mixture, a gas pipe (16) or gas duct for providing the gas of the gas/air mixture, an exhaust pipe (17) or exhaust duct through which exhaust flowing out of said burner chamber (11) can emerge into the ambient of the gas burner appliance, a fan (19) being assigned to the exhaust pipe (17) or to the air pipe (14) and a gas valve (18) being assigned to the gas pipe (16), wherein for modulation of the burner load the valve position of the gas valve (18) is changed, a flame ionization sensor (24) providing a measurement signal. During active combustion of the gas/air mixture while the fan (19) is running at a first fan speed and while the valve position of the gas valve (18) is at a first valve position, the fan speed of the fan (19) will be decreased to a second fan speed, the valve position of the gas valve (18) will be kept constant or almost constant and the change of the measurement signal of the flame ionization sensor (24) will be monitored. If the change of the measurement signal of the flame ionization sensor (24) is smaller than a threshold after the decrease of the fan speed of the fan (19) to the second fan speed, an actual gas supply pressure in the gas pipe (16) being smaller than a nominal gas supply pressure or an obstructed exhaust pipe (17) and/or obstructed air pipe (15) is detected. If the change of the measurement signal of the flame ionization sensor (24) is greater than the threshold after the decrease of the fan speed of the fan (19) to the second fan speed, an actual gas supply pressure in the gas pipe (16) corresponding to the nominal gas supply pressure and an unobstructed exhaust pipe (17) and unobstructed air pipe (15) is detected.

IPC 8 full level
F23N 5/12 (2006.01); **F23D 14/02** (2006.01); **F23N 5/24** (2006.01)

CPC (source: EP)
F23D 14/02 (2013.01); **F23N 5/12** (2013.01); **F23N 5/242** (2013.01); **F23N 5/245** (2013.01); **F23N 2231/10** (2020.01); **F23N 2231/26** (2020.01); **F23N 2233/04** (2020.01)

Citation (applicant)
EP 2447609 B1 20130925 - HONEYWELL TECHNOLOGIES SARL [CH]

Citation (search report)
• [XDI] EP 2447609 B1 20130925 - HONEYWELL TECHNOLOGIES SARL [CH]
• [A] EP 3081861 A1 20161019 - BOSCH GMBH ROBERT [DE]
• [A] DE 10258187 A1 20040325 - WOLF GMBH [DE]

Cited by
CN113586500A

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3327351 A1 20180530; EP 3327351 B1 20191009

DOCDB simple family (application)
EP 16200264 A 20161123