

Title (en)  
AN AIR-GAS MIXTURE BURNING APPLIANCE WITH A VARIABLE EQUIVALENCE RATIO IGNITION SEQUENCE

Title (de)  
LUFT-GAS-GEMISCHVERBRENNUNGSGERÄT MIT EINER ZÜNDSEQUENZ MIT VARIABLEM ÄQUIVALENZVERHÄLTNIS

Title (fr)  
APPAREIL DE COMBUSTION D'UN MÉLANGE AIR-GAZ COMPORTANT UNE SÉQUENCE D'ALLUMAGE À RAPPORT D'ÉQUIVALENCE VARIABLE

Publication  
**EP 3971475 A2 20220323 (EN)**

Application  
**EP 21191591 A 20210817**

Priority  
GB 202014984 A 20200922

Abstract (en)  
In an air-gas mixture burning appliance (100) that comprises a burning unit (120) for burning a combustible air-gas mixture (130, 131), a flame detector (150) for sensing presence of a flame (122) in the burning unit (120), an air-gas mixing unit (110) that is arranged upstream of the burning unit (120) for mixing of air and gas to form the combustible air-gas mixture (130, 131), and a gas supply unit (116) that is arranged upstream of the air-gas mixing unit (110), the gas supply unit (116) is adapted to regulating a flow of gas to the air-gas mixing unit (110) such that the combustible air-gas mixture (130, 131) has a variable equivalence ratio between gas and air that is based on whether the flame detector (150) senses the presence of the flame (122) or fails to sense the presence of a flame (122) in the burning unit (120).

IPC 8 full level  
**F23N 1/00** (2006.01)

CPC (source: EP GB)  
**F23D 14/725** (2013.01 - GB); **F23N 1/002** (2013.01 - EP); **F23N 5/24** (2013.01 - GB); **F23N 2227/00** (2020.01 - EP)

Citation (applicant)  
• KR 100839523 B1 20080619 - UNIVERSAL ENERGY INC [KR]  
• KR 19980062747 U 19981116

Cited by  
EP4390225A1; WO2024132576A1; EP4390223A1; WO2024132566A1

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)  
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DOCDB simple family (application)  
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