

Title (en)  
FLAME DETECTION FOR COMBUSTION APPLIANCES

Title (de)  
FLAMMENDETEKTION FÜR VERBRENNUNGSVORRICHTUNGEN

Title (fr)  
DÉTECTION DE FLAMME POUR APPAREILS DE COMBUSTION

Publication  
**EP 3339736 A1 20180627 (EN)**

Application  
**EP 17202230 A 20171117**

Priority  
EP 16205682 A 20161221

Abstract (en)  
Flame detection for combustion appliances. A sensor configuration comprising a sensor (1) with sensor terminals, the at least a sensor (1) being configured to produce a signal offset when receiving at least 1.1 Lux, and to produce equal signals when receiving less than 1.1 Lux, a differential amplifier (2) produces a current at its output channel (3) in response to the signal offset applied to its input channels, a load member (6) dissipates a first amount of power as a function of the current produced at the output channel (3), the differential amplifier (2) draws a first load current from the supply terminals (7, 8) in response to the signal offset applied by the sensor (1) to its input channels, the differential amplifier (2) draws a second quiescent current from the supply terminals (7, 8) in response to equal signals applied to its input channels (-, +).

IPC 8 full level  
**F23N 5/08** (2006.01)

CPC (source: EP)  
**F23N 5/082** (2013.01); **F23N 2229/12** (2020.01)

Citation (applicant)  
• CN 101221071 B 20101006 - YAMATAKE CO LTD  
• EP 0942232 B1 20050921 - GEN ELECTRIC [US]  
• DE 2654881 A1 19780921 - LANDIS & GYR AG

Citation (search report)  
• [AD] DE 2654881 A1 19780921 - LANDIS & GYR AG  
• [A] US 4491142 A 19850101 - SHIMIZU KUNIO [JP]  
• [A] US 6652266 B1 20031125 - MURGU CRISTIAN [CA], et al  
• [AD] EP 0942232 B1 20050921 - GEN ELECTRIC [US]

Cited by  
RU2727815C1; EP4397907A1; EP3663646A1; US11105509B2; EP4283195A1; EP4283196A1

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 3339736 A1 20180627; EP 3339736 B1 20190410**; ES 2735213 T3 20191217; TR 201906363 T4 20190521

DOCDB simple family (application)  
**EP 17202230 A 20171117**; ES 17202230 T 20171117; TR 201906363 T 20171117