

Title (en)
Circuit for flame detection

Title (de)
Schaltungsanordnung zur Flammerkennung

Title (fr)
Circuit de détection de flamme

Publication
EP 0635638 B1 19981125 (DE)

Application
EP 94109218 A 19940615

Priority
• DE 4324863 A 19930723
• DE 9311065 U 19930723

Abstract (en)
[origin: EP0635638A2] Circuit for flame detection for a transistor coil ignition of a burner. The transistor coil ignition has a driving stage which drives a power transistor (Tr2) located in the circuit of the primary winding of an ignition coil (ZS) in order to charge the primary winding of the ignition coil (ZS) with a charge current from a power supply. A switching device (ZG1, S1) is provided with an ignition and flame detection device which in the flame detection position limits the charge current flowing across the primary winding of the ignition coil (ZS) to a level which lies below that which is necessary to produce an ignition spark in the ignition position so that without a flame an ignition flashover cannot take place. An evaluation circuit (Glr1, R3, C2, K2) evaluates the signal, occurring after the disconnection of the charge current flowing across the primary winding of the ignition coil (ZS), from the primary winding of the ignition coil (ZS), this signal having pulse peaks when the flame is absent and no such pulse peaks when the flame is present. The evaluation takes place preferably at a display signal which is present at a display device (A1) in order to display the presence and absence of a flame in the burner. <IMAGE>

IPC 1-7
F02P 17/00; F23N 5/12; F02P 15/00

IPC 8 full level
F02P 3/05 (2006.01); **F02P 17/12** (2006.01); **F23N 5/12** (2006.01); **F23Q 3/00** (2006.01)

CPC (source: EP)
F02P 3/053 (2013.01); **F02P 17/12** (2013.01); **F23N 5/123** (2013.01); **F23Q 3/004** (2013.01); **F02P 2017/123** (2013.01); **F02P 2017/126** (2013.01); **F23N 2223/22** (2020.01); **F23N 2227/36** (2020.01)

Cited by
CN109780569A

Designated contracting state (EPC)
DE ES FR GB IT SE

DOCDB simple family (publication)
DE 9311065 U1 19930909; EP 0635638 A2 19950125; EP 0635638 A3 19950621; EP 0635638 B1 19981125

DOCDB simple family (application)
DE 9311065 U 19930723; EP 94109218 A 19940615