

Title (en)  
FLAME DETECTION APPARATUS AND METHOD

Publication  
**EP 0388065 A3 19910424 (EN)**

Application  
**EP 90302390 A 19900306**

Priority  
GB 8906235 A 19890317

Abstract (en)  
[origin: EP0388065A2] Apparatus and methods are described for the detection of the presence of a flame (10), the apparatus including circuit means for applying an alternating voltage to a flame probe (2) such that the alternating voltage is partially rectified in the presence of a flame (10) at the probe (2) resulting in the development of a DC voltage component. The DC voltage component causes the accumulation of a corresponding electrical charge in a storage element (18), the apparatus includes means (120,36) for periodically releasing the charge. An optical coupling means (40) is responsive to the released charge to initiate a control signal in a control signal generator (130), the control signal indicating detection of the flame (10).

IPC 1-7  
**F23N 5/12**

IPC 8 full level  
**F23N 5/12** (2006.01)

CPC (source: EP)  
**F23N 5/123** (2013.01); **F23N 2223/20** (2020.01); **F23N 2229/00** (2020.01); **F23N 2229/12** (2020.01)

Citation (search report)  
• [Y] DE 1526255 A1 19700402 - MAY & CHRISTE GMBH  
• [YD] GB 1419653 A 19751231 - KIDDE & CO WALTER  
• [A] US 4370125 A 19830125 - DONNELLY DONALD E, et al  
• [A] US 3348104 A 19671017 - ZIELINSKI ROBERT J, et al  
• [A] PATENT ABSTRACTS OF JAPAN vol. 4, no. 150 (M-37)(632) 22 October 1980, & JP-A-55 102826 (TOKYO SHIBAURA) 06 August 1980,

Cited by  
EP1211460A3; EP0908679A1; EP0634611A1; EP0525345A1; DE4122636C2; US6501383B1; WO9919672A1

Designated contracting state (EPC)  
BE DE FR NL

DOCDB simple family (publication)  
**EP 0388065 A2 19900919; EP 0388065 A3 19910424**; GB 2230632 A 19901024; GB 8906235 D0 19890504; GB 9004948 D0 19900502

DOCDB simple family (application)  
**EP 90302390 A 19900306**; GB 8906235 A 19890317; GB 9004948 A 19900306