

Title (en)  
PHOTOELECTRIC SMOKE DETECTOR

Publication  
**EP 0130992 B1 19870408 (DE)**

Application  
**EP 83902981 A 19831005**

Priority  
CH 11983 A 19830111

Abstract (en)  
[origin: WO8402790A1] In a photoelectric smoke detector, a radiation source (2) is intermittently actuated by a control unit (1) and the radiation on which smoke particles have an influence, for example the diffused radiation, is picked up by a radioreceiver (9). The signal from the radioreceiver (9) is supplied to a signal processing unit (11) simultaneously actuated by the control unit (1) having a phase sensitive unit which reverses the received signal according to the phase position of the signal from the control unit (1) and supplies the signal thus modified to an integration unit of which the integrated output signal actuates a display unit (13); the latter may for example provide an alarm signal when the integrated signal, that is the fume density, exceeds a predetermined threshold value, or may display the smoke density. Thereby, low smoke signals may be safely and reliably detected, even when they are completely covered by background noise. Such a fume detector may be conveniently used as a sensitive and reliable fire warning device.

IPC 1-7  
**G08B 17/10**; **G08B 29/00**

IPC 8 full level  
**G01N 21/53** (2006.01); **G01N 21/59** (2006.01); **G08B 17/10** (2006.01); **G08B 17/107** (2006.01); **G08B 29/00** (2006.01); **G08B 29/18** (2006.01)

IPC 8 main group level  
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