

Title (en)
SMOKE DETECTOR

Publication
EP 0079010 B1 19860611 (DE)

Application
EP 82110013 A 19821029

Priority
CH 724881 A 19811111

Abstract (en)
[origin: ES8401656A1] A smoke detector is disclosed having a radiation source operated in a pulsed mode. Externally of a direct radiation region of the radiation source there is arranged a radiation receiver which, in the presence of smoke or other particles emanating from a combustion process and located in the radiation region, is impinged by scattered radiation and delivers an output signal to an evaluation circuit. The evaluation circuit contains switching elements which, when the number of source output signals or pulses exceeds a predetermined threshold value for the number of source output pulses, delivers an alarm signal. Near to the radiation receiver there is arranged a reference cell in the direct radiation beam of the radiation source, this reference cell controlling the emission of radiation by the radiation source. Further, there is provided circuitry which, in the presence of a slow change in the amplitude of the receiver output pulse, adjusts an amplitude threshold value set for the amplitude of the receiver output pulse at a rate corresponding to a time-constant of more than one minute. Consequently, there is obtained an output signal of the radiation receiver which is dependent upon the smoke density and which is independent of the contamination or soiling of the smoke detector.

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IPC 8 full level
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