Title (en)

SMOKE DETECTOR ACCORDING TO THE RADIATION-EXTINCTION PRINCIPLE

Publication

EP 0094534 B1 19870114 (DE)

Application

EP 83104219 A 19830429

Priority

CH 297382 A 19820513

Abstract (en)

[origin: ES8404535A1] In a line extinction detector using a pulse-operated radiation source, a radiation receiver is connected to an input amplifier of an evaluation circuit. The output pulses generated by the input amplifier are compared to a reference voltage. Circuit elements having a time constant above one minute are provided to adjust either one of the voltage of the output pulses or the reference voltage such that their difference practically becomes zero. The output pulses of the input amplifier are further compared to an alarm threshold derived from the reference voltage and an alarm is triggered when the output signal falls below the alarm threshold value. The output pulses of the input amplifier are also compared to a disturbance threshold value and a disturbance signal is generated when the output signal drops below the disturbance threshold value. A further disturbance signal value is also triggered at preset limits for the compensating adjustment between the output signal of the input amplifier and the reference voltage. A device permits to change the ratio of the alarm threshold value and the reference voltage in order to adapt the sensitivity of the smoke detector to different distances between the radiation source and the radiation receiver.

IPC 1-7

G08B 17/10

IPC 8 full level

G01N 21/59 (2006.01); **G08B 17/10** (2006.01); **G08B 17/103** (2006.01); **G08B 29/04** (2006.01)

CPC (source: EP US)

G08B 17/103 (2013.01 - EP US); **G08B 29/043** (2013.01 - EP US)

Cited by

EP0596500A1; EA026448B1; AU654438B2; CN113538837A; CN113990023A; GB2158278A; AT388059B; WO2013014561A1

Designated contracting state (EPC)

BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0094534 A1 19831123; **EP 0094534 B1 19870114**; CA 1208335 A 19860722; DE 3369213 D1 19870219; ES 522683 A0 19840416; ES 8404535 A1 19840416; JP H0441395 B2 19920708; JP S58214997 A 19831214; NO 159967 B 19881114; NO 159967 C 19890222; NO 831682 L 19831114; US 4559453 A 19851217; ZA 833436 B 19840125

DOCDB simple family (application)

EP 83104219 A 19830429; CA 427475 A 19830504; DE 3369213 T 19830429; ES 522683 A 19830513; JP 8284983 A 19830513; NO 831682 A 19830511; US 49170783 A 19830505; ZA 833436 A 19830513