

Title (en)
RADIATION SMOKE ALARM

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Application
EP 83108590 A 19830831

Priority
DE 3233368 A 19820908

Abstract (en)
[origin: EP0105199A1] 1. A radiation smoke alarm which comprises a radiation source and a radiation receiver, wherein the radiation source transmits its radiation, via a focussing element, in the form of a sharply defined beam (15) into a measuring space (25), and wherein the radiation receiver receives any change in radiation produced by smoke particles and measures the intensity thereof, and wherein the radiation receiver is connected to an analysis device which analyses the measured values, where the measuring space (25) contains diaphragms (8) which are not located in the beam path (14, 15) but intercept scattered radiation, whereby between the measuring space (25) and the receiver, there is a focussing element which laterally defines the field of vision of the receiver in a direction towards the area of the greatest intensity of the beam (15) transmitted to the measuring space (25), the two focussing elements being precisely fixed in their mutually relative positions and in relation to the diaphragms (8) contained in the measuring space (25), characterised in that the radiation source and the radiation receiver are accommodated in separate chambers insulated from one another in respect of radiation, and that the radiation source and the radiation receiver are connected to the measuring space (25) via radiation conductors (23, 24), where the radiation source and the radiation receiver are arranged in the vicinity of the corresponding end faces of the radiation conductors (23, 24) without special means for position adjustment, and where the focussing elements are formed by curved surfaces (26, 27) of the radiation conductors (23, 24) which face towards the measuring space (25), and where at least one beam defining diaphragm (22) is arranged between the radiation conductors (23, 24) and the measuring space (25).

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IPC 8 full level
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CPC (source: EP)
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Cited by
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