Title (en)

IONIZATION TYPE OF SMOKE SENSOR.

Title (de)

RAUCHSENSOR DES IONISATIONSTYPS.

Title (fr)

DETECTEUR DE FUMEE DU TYPE A IONISATION.

Publication

EP 0111012 A1 19840620 (DE)

Application

EP 83901734 A 19830607

Priority

JP 8351082 U 19820607

Abstract (en)

[origin: WO8304449A1] This relates to an ionization type of smoke sensor for a fire alarm, and in particular to an ionization type of smoke sensor in which an internal ion chamber (a) consists of an inner electrode (6) and an intermediate electrode (8), and an outer ion chamber (b) consists of the intermediate electrode (8) and an outer electrode (11), these chambers (a, b) ionizing the air within them by a radiation source (3). In the ionization smoke sensor of this type according to this invention, the radiation source is difficult to contaminate. When smoke is actually applied during an operating test, in order that the smoke can diffuse immediately after the test and the operation can recover readily, the source (3) is surrounded by the inner electrode (6), a substrate (1), and a ring wall (2), the intermediate electrode (8) is supported by a plurality of posts (9) extending from the substrate (1), and holes (7, 10) are formed in the electrodes (6) and (8) so that the radiation from the source (3) can be emitted through the holes (7, 10) to the chambers (a, b).

Abstract (de)

This relates to an ionization type of smoke sensor for a fire alarm, and in particular to an ionization type of smoke sensor in which an internal ion chamber (a) consists of an inner electrode (6) and an intermediate electrode (8), and an outer ion chamber (b) consists of the intermediate electrode (8) and an outer electrode (11), these chambers (a,b) ionizing the air within them by a radiation source (3). In the ionization smoke sensor of this type according to this invention, the radiation source is difficult to contaminate. When smoke is actually applied during an operating test, in order that the smoke can diffuse immediately after the test and the operation can recover readily, the source (3) is surrounded by the inner electrode (6), a substrate (1), and a ring wall (2), the intermediate electrode (8) is supported by a plurality of posts (9) extending from the substrate (1), and holes (7, 10) are formed in the electrodes (6) and (8) so that the radiation from the source (3) can be emitted through the holes (7, 10) to the chambers (a,b).

Abstract (fr)

Détecteur de fumée du type à ionisation pour une alarme d'incendie, et plus particulièrement détecteur de fumée du type à ionisation dans lequel une chambre interne d'ions (a) consiste en une électrode interne (6) et en une électrode intermédiaire (8), et une chambre externe d'ions (b) consiste en cette électrode intermédiaire (8) et en une électrode externe (11), ces chambres (a, b) ionisant l'air à l'intérieur d'elles par une source de radiation (3). Dans le détecteur de fumée à ionisation de ce type selon l'invention, la source de radiation est difficile à contaminer. Lorsque la fumée est effectivement appliquée pendant un test de fonctionnement, afin que la fumée puisse se diffuser immédiatement après le test et que le fonctionnement reprenne sans problème, la source (3) est entourée par l'électrode interne (6), un substrat (1), et une paroi annulaire (2), l'électrode intermédiaire (8) est supportée par une pluralité de montants (9) s'étendant depuis le substrat (1), et des trous (7, 10) sont percés dans les électrodes (6 et 8) de sorte que la radiation provenant de la source (3) est émise au travers des trous (7, 10) vers les chambres (a, b).

IPC 1-7

G08B 17/10; G01N 27/64

IPC 8 full level

G01N 27/64 (2006.01); **G08B 17/10** (2006.01); **G08B 17/11** (2006.01); **G08B 17/113** (2006.01)

CPC (source: EP US)

G08B 17/113 (2013.01 - EP US)

Cited by

EP0217100A3; EP0236223A1; FR2594953A1

Designated contracting state (EPC)

BE CH DE FR GB LI

DOCDB simple family (publication)

EP 0111012 A1 19840620; **EP 0111012 A4 19841211**; **EP 0111012 B1 19890809**; DE 3380374 D1 19890914; JP H029430 Y2 19900308; JP S58186463 U 19831210; US 4594512 A 19860610; WO 8304449 A1 19831222

DOCDB simple family (application)

EP 83901734 A 19830607; DE 3380374 T 19830607; JP 8300187 W 19830607; JP 8351082 U 19820607; US 57392384 A 19840110