

Title (en)

Smoke detector and sampling air supplying method for smoke detector

Title (de)

Rauchdetektor und Probeluftversorgungsverfahren für den Rauchdetektor

Title (fr)

Détecteur de fumée et procédé de fourniture d'air d'échantillonnage pour le détecteur de fumée

Publication

EP 1975896 B1 20100505 (EN)

Application

EP 08251196 A 20080328

Priority

JP 2007091276 A 20070330

Abstract (en)

[origin: EP1975896A2] In order to enable supply of a sampling air to a smoke detection portion at a stable flow velocity, the present invention provides a smoke detector including: a black box (21) including a smoke detection portion (25) having an inflow port and an outflow port; a sampling pipe (30) laid in a monitor space; a gas flow pipe (P) connected to the sampling pipe and which houses a fan (3) therein; a flow path branching portion (33) provided to the gas flow pipe on a secondary side of the fan and connected to the inflow port of the smoke detection portion; and a flow path merging portion (32) which is provided to the gas flow pipe on the secondary side of the fan and connected to the outflow port of the smoke detection portion, and at which a pressure of a fluid flowing through the gas flow pipe is lower than a fluid flowing through the gas flow pipe at the flow path branching portion. Such pressure difference ensures that a constant flow rate is maintained in the smoke detection portion, thereby enabling a reliable smoke detection.

IPC 8 full level

G08B 17/10 (2006.01)

CPC (source: EP KR)

G08B 17/10 (2013.01 - EP KR); **G08B 17/113** (2013.01 - EP KR)

Cited by

CN108837651A; CN117746567A; US9140646B2; US11506586B2; US8907802B2; US9142112B2; US9142113B2; US10041877B2; US10712263B2; US8947243B2; US8947244B2; US8952821B2; US9470626B2

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