

Title (en)
Fire sensor and method for detecting fire

Title (de)
Brandsensor und Verfahren zur Erkennung von Bränden

Title (fr)
Capteur d'incendie et procédé de détection de feu

Publication
EP 2320397 A1 20110511 (EN)

Application
EP 09174290 A 20091028

Priority
EP 09174290 A 20091028

Abstract (en)
A fire sensor is disclosed for detecting fire in a monitored region. The fire sensor comprises: a chamber in fluid communication with the monitored region via at least one inlet; an internal detector assembly adapted to detect fire products within the chamber and to output a corresponding internal detection signal; an external detector assembly adapted to detect fire products outside the chamber in the monitored region and to output a corresponding external detection signal; a fluid transport device, such as a fan, adapted to draw a sample of the atmosphere from the monitored region into the chamber through the at least one inlet; and a controller adapted to activate the fluid transport device upon receipt of a trigger signal based on the external detection signal to thereby draw a sample of the atmosphere from the monitored region into the chamber for analysis by the internal detector assembly. Also provided is a corresponding fire detection system and method of detecting fire. The dual detection system is less subject to false alarms than a mere external chamber fire sensor, since the alarm situations detected by the external detector activate a verification of the fire event by the second, internal detector. Also, the fan is active only intermittently, thereby consuming less energy than a mere internal chamber fire sensor, while maintaining its reliability.

IPC 8 full level
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CPC (source: EP)
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Citation (search report)
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