Title (en)

Method and sensor for fire detection

Title (de)

Verfahren und Sensor zur Brandmeldung

Title (fr)

Procédé et capteur pour signaler un incendie

Publication

EP 0940789 A3 20000816 (DE)

Application

EP 99103015 A 19990215

Priority

DE 19809763 A 19980306

Abstract (en)

[origin: EP0940789A2] The fire alarm method involves transmission of ultrasound signals from one transmitter and microwave- or optical- signals, or a combination of all three different wave-types from an additional transmitter. Doppler signals reflected from objects are received by receivers assigned to the transmitters, and the received signals are evaluated separately and in combination, so that a varied reception signal is detected for one type of wave, in the case that a reception signal for one or more other types of wave shows no movement, smoke, particles or variation in the gas composition in the detection zone.

IPC 1-7

G08B 17/10; G08B 17/12; G08B 29/04; G08B 19/00; G08B 13/16; G08B 13/184

IPC 8 full level

G08B 13/16 (2006.01); **G08B 13/184** (2006.01); **G08B 17/10** (2006.01); **G08B 17/12** (2006.01); **G08B 19/00** (2006.01); **G08B 29/04** (2006.01); **G08B 29/18** (2006.01)

CPC (source: EP)

G08B 17/10 (2013.01); **G08B 29/183** (2013.01); **G08B 29/186** (2013.01)

Citation (search report)

- [A] EP 0467388 A2 19920122 - SPECTRONIX LTD [IL]
- [A] EP 0103375 A1 19840321 - MONICELL LTD [GB]
- [X] US 4625199 A 19861125 - PANTUS MATH M J [NL]
- [PX] RUSER, H; MAGORI, V.: "FIRE DETECTION WITH A COMBINED ULTRASONIC-MICROWAVE DOPPLER SENSOR", 4 October 1998, IEEE ULTRASONICS SYMPOSIUM, USA, XP002140398

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JP2017134611A; US7356438B2; US11132884B2; WO2020251733A1; EP1687787B1; EP1548416B1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0940789 A2 19990908; **EP 0940789 A3 20000816**; **EP 0940789 B1 20021023**; AT E226747 T1 20021115; DE 19809763 A1 19991202; DE 59903134 D1 20021128; ES 2186261 T3 20030501

DOCDB simple family (application)

EP 99103015 A 19990215; AT 99103015 T 19990215; DE 19809763 A 19980306; DE 59903134 T 19990215; ES 99103015 T 19990215