

Title (en)

Hazard recognition utilising a temperature measurement device integrated in a microcontroller

Title (de)

Gefahrenerkennung mit Einbezug einer in einem Mikrocontroller integrierten Temperaturmesseinrichtung

Title (fr)

Détection de danger incluant un dispositif de mesure de température intégré dans un microcontrôleur

Publication

EP 2091029 B2 20201118 (DE)

Application

EP 08101643 A 20080215

Priority

EP 08101643 A 20080215

Abstract (en)

[origin: EP2091029A1] The detector (100) has an optical measuring device for detecting a physical measuring variable and transmitting measurement signals indicative of a preset dangerous situation e.g. smoke. A microcontroller (120) is downstream of the device and evaluates the signals. A temperature measuring diode (125) detects absolute temperature and transmits a temperature measurement signal indicative of the detected temperature. The diode is integrated in the microcontroller that considers the temperature measuring signal during the evaluation of the measurement signals. Independent claims are also included for the following: (1) a method for detecting a dangerous situation (2) a computer-readable storage medium comprising a program that is executed by a microcontroller of a danger detector to perform a method for detecting a dangerous situation (3) a program-element for execution by a microcontroller of a danger detector to perform a method for detecting a dangerous situation.

IPC 8 full level

G08B 17/06 (2006.01); **G08B 17/107** (2006.01); **G08B 17/113** (2006.01); **G08B 29/18** (2006.01); **G08B 29/24** (2006.01)

CPC (source: EP)

G08B 17/06 (2013.01); **G08B 17/107** (2013.01); **G08B 17/113** (2013.01); **G08B 29/24** (2013.01)

Citation (opposition)

Opponent :

- WO 9714092 A1 19970417 - MICROCHIP TECH INC [US]
- DE 60010411 T2 20050519 - E I TECHNOLOGY LTD [IE]
- WO 9820615 A2 19980514 - ELECTRONICS DEV CORP [US], et al
- US 5691704 A 19971125 - WONG JACOB Y [US]
- EP 0654770 A1 19950524 - CERBERUS AG [CH]
- DE 20219524 U1 20030327 - BRECHT THOMAS [DE]
- DE 102004024284 A1 20050203 - BOSCH GMBH ROBERT [DE]
- Thomas Net News, 'Microcontrollers include internal temperature sensor', (02032005, Fundstelle:<http://news.thomasnet/fullstory/>, gefunden am 23092011.
- Wikimedia Foundation Inc., 'Mikrocontroller' (21012008, gefunden am 20092011, Fundstelle:<http://de.wikipedia.org/wiki/Mikrocontroller>) & Wikimedia Foundation Inc., 'Anwendungsspezifische integrierte Schaltung' (26012008, gefunden am 20092011, Fundstelle:http://de.wikipedia.org/wiki/Anwendungsspezifische_integrierte_Schaltung) & Wikimedia Foundation Inc., 'Multi-Chip-Modul' (26062007, gefunden am 20092011, Fundstelle:<http://de.wikipedia.org/wiki/Multi-Chip-Modul>) & Wikimedia Foundation Inc., 'Die (Halbleitertechnik)' (gefunden am 20092011, Fundstelle:[http://de.wikipedia.org/wiki/Die_\(Halbleitertechnik\)](http://de.wikipedia.org/wiki/Die_(Halbleitertechnik)))
- Wu, Randy, 'Digital Fan Control with Tachometer using MSP430.Application report SLAA259-November 2005' & Texas Instruments, 'Application Notes fpr 4xx 8/16MHz LCD series, M5P430(TM) 16-bit Ultra-Low Power MCUs', gefunden am 23092011, Fundsstelle : (<http://focus.ti.com/mcu/docs/mcutechdocs.tsp>)
- Application Note zum 56F83xx Temperaturesensor von Freescale Semiconductor

Cited by

EP2463837A1; WO2011128099A1; WO2011128100A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2091029 A1 20090819; **EP 2091029 B1 20101229**; **EP 2091029 B2 20201118**; AT E493724 T1 20110115; DE 502008002126 D1 20110210; WO 2009101187 A1 20090820

DOCDB simple family (application)

EP 08101643 A 20080215; AT 08101643 T 20080215; DE 502008002126 T 20080215; EP 2009051730 W 20090213