

Title (en)
METHOD FOR DETECTING A SUBSTANCE CONTAINED IN A GASEOUS MEDIUM, COMPUTER PROGRAM, ANALYSIS UNIT, AND SENSOR DEVICE

Title (de)
VERFAHREN ZUR ERFASSUNG EINER IN EINEM GASFÖRMIGEN MEDIUM ENTHALTENEN SUBSTANZ, COMPUTERPROGRAMM, AUSWERTEEINHEIT UND SENSOREINRICHTUNG

Title (fr)
PROCÉDÉ DE DÉTECTION D'UNE SUBSTANCE CONTENUE DANS UN MILIEU GAZEUX, PROGRAMME INFORMATIQUE, UNITÉ D'ÉVALUATION ET DISPOSITIF DE CAPTEURS

Publication
EP 3423815 A1 20190109 (DE)

Application
EP 17709383 A 20170224

Priority
• DE 102016103563 A 20160229
• EP 2017054335 W 20170224

Abstract (en)
[origin: WO2017148817A1] The invention relates to a method for detecting a substance contained in a gaseous medium using a sensor device which has at least one sensor component with at least one detection surface. The sensor component has a material which chemically binds to the substance to be detected at least in the region of the detection surface or consists of said material such that at least the detection surface chemically changes upon contacting the substance to be detected. The method has the following steps: a) the detection surface is exposed to the gaseous medium, b) after an exposure time of the gaseous medium to the detection surface, the sensor component is heated by supplying energy, in particular the sensor component is endothermically heated, c) the temperature of the sensor component is detected at least at a measurement time during which the sensor component is being heated, and d) an initial variable of the method is determined from the curve of the detected temperature over time, wherein the initial variable characterizes the quantity of the substance to be detected accumulated on the detection surface during the exposure time and/or the quantity of the substance to be detected incorporated in the sensor component. The invention further relates to a computer program, to an analysis unit for determining the initial variable of a sensor device in order to detect a substance in a gaseous medium, and to a corresponding sensor device.

IPC 8 full level
G01N 25/48 (2006.01)

CPC (source: EP)
G01N 25/4893 (2013.01); **G01N 33/0045** (2013.01); **G01N 33/0057** (2013.01)

Citation (search report)
See references of WO 2017148817A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102016103563 A1 20170831; **DE 102016103563 B4 20240620**; EP 3423815 A1 20190109; WO 2017148817 A1 20170908

DOCDB simple family (application)
DE 102016103563 A 20160229; EP 17709383 A 20170224; EP 2017054335 W 20170224