

Title (en)

SENSOR ELEMENT FOR A CHEMICAL SENSOR AND CHEMICAL SENSOR

Title (de)

SENSORELEMENT FÜR EINEN CHEMISCHEN SENSOR UND CHEMISCHER SENSOR

Title (fr)

ÉLÉMENT DE CAPTEUR POUR CAPTEUR CHIMIQUE ET CAPTEUR CHIMIQUE

Publication

**EP 3325958 A4 20190123 (EN)**

Application

**EP 15898415 A 20150710**

Priority

SG 2015050210 W 20150710

Abstract (en)

[origin: WO2017010932A1] The present invention provides a sensor element (10) for a chemical sensor with a substrate with a first electrode (14a) and a second electrode (14b) designed for a voltage application and a sensing layer (18) comprising at least a first material, wherein, in case that at least one target analyte (12) is present, an electric field (E) within the sensing layer (18) is changed, wherein the sensor element (10) also comprises a conducting layer (20) comprising at least a second material, wherein the conducting layer (20) provides an electrical connection between the first electrode (14a) and the second electrode (14b) and is covered at least partially by the sensing layer (18), and wherein an electric field (E) or a Fermi level is changed within the conducting layer (20) in case that the electric field (E) within the sensing layer (18) is changed.

IPC 8 full level

**G01N 27/12** (2006.01)

CPC (source: EP)

**G01N 27/126** (2013.01)

Citation (search report)

- [XYI] US 2013075794 A1 20130328 - BRADLEY KEITH [US], et al
- [XYI] US 2010039124 A1 20100218 - BELBRUNO JOSEPH J [US], et al
- [XYI] CN 102692445 A 20120926 - CHANGCHUN APPLIED CHEMISTRY
- [A] ZHOU XIAOQING ET AL: "Preparation, characterization and NH<sub>3</sub>-sensing properties of reduced graphene oxide/copper phthalocyanine hybrid material", SENSORS AND ACTUATORS B: CHEMICAL: INTERNATIONAL JOURNAL DEVOTED TO RESEARCH AND DEVELOPMENT OF PHYSICAL AND CHEMICAL TRANSDUCERS, ELSEVIER BV, NL, vol. 193, 2 December 2013 (2013-12-02), pages 340 - 348, XP028818814, ISSN: 0925-4005, DOI: 10.1016/J.SNB.2013.11.090
- See references of WO 2017010932A1

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

DOCDB simple family (publication)

**WO 2017010932 A1 20170119**; EP 3325958 A1 20180530; EP 3325958 A4 20190123

DOCDB simple family (application)

**SG 2015050210 W 20150710**; EP 15898415 A 20150710