

Title (en)

USE OF AN ION CONDUCTOR FOR A GAS SENSOR

Title (de)

VERWENDUNG EINES IONENLEITERS FÜR EINEN GASSENSOR

Title (fr)

UTILISATION D'UN CONDUCTEUR D'IONS POUR UN CAPTEUR DE GAZ

Publication

EP 2195647 A2 20100616 (DE)

Application

EP 08837966 A 20081002

Priority

- EP 2008008343 W 20081002
- DE 102007048049 A 20071005

Abstract (en)

[origin: WO2009046927A2] A single ion conductor is used for measuring environmentally polluting components of exhaust gas, in particular as an oxygen pump. To determine NOx in the exhaust gas, a sensor chip which has a single ion conductor for determining NOx is fitted in the exhaust gas conduit. The sensor chip preferably has a heating resistor and is heated by the latter. A chip with a heating conductor and an oxygen pump on its substrate is provided with an exhaust protector. The external electrode of an oxygen pump contains not only platinum but also at least 20% by weight gold, rhodium, ruthenium, palladium or silver. Arranged on an electrically insulating surface of a substrate is a resistance structure and, parallel to and at a distance from said structure, an ion conductor, which as a cover closes off a space between the substrate and the side walls.

IPC 8 full level

G01N 27/407 (2006.01)

CPC (source: EP)

G01N 27/4074 (2013.01); **G01N 27/4075** (2013.01); **G01N 27/4077** (2013.01); **G01N 33/0037** (2013.01); **Y02A 50/20** (2017.12)

Citation (search report)

See references of WO 2009046927A2

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

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

DE 102007048049 A1 20090416; EP 2195647 A2 20100616; EP 2226628 A1 20100908; EP 2226629 A1 20100908;
WO 2009046927 A2 20090416; WO 2009046927 A3 20090528

DOCDB simple family (application)

DE 102007048049 A 20071005; EP 08837966 A 20081002; EP 10005986 A 20081002; EP 10006033 A 20081002; EP 2008008343 W 20081002