

Title (en)

SENSOR TO DETERMINE THE GAS COMPONENT CONCENTRATION IN GAS MIXTURES

Title (de)

SENSOR ZUR BESTIMMUNG DER KONZENTRATION VON GASKOMPONENTEN IN GASGEMISCHEN

Title (fr)

CAPTEUR PERMETTANT DE DETERMINER LA CONCENTRATION DE GAZ DANS DES MELANGES GAZEUX

Publication

EP 0698208 A1 19960228 (DE)

Application

EP 95910421 A 19950228

Priority

- DE 9500255 W 19950228
- DE 4408504 A 19940314

Abstract (en)

[origin: DE4408504A1] The proposal is for a sensor for determining the gas component concentration in gas mixtures. The sensor has a solid oxygen-ion-conducting electrolyte (10) having a first measuring electrode (11) which catalyses the equilibrium setting of the gas mixture and a second measuring electrode (12) which does not catalyse or only slightly catalyses the equilibrium setting of the exhaust gas, and a heating device (16) to control the temperature of the measuring electrodes (11, 12). The first (11) and second (12) measuring electrodes are arranged in different temperature regions of the solid electrolyte (10) in such a way that the catalytic activity of the measuring electrodes (11, 12) can be adjusted via the temperature. The sensor is particularly suitable for monitoring the function ability of catalysts in exhaust gas purification devices of internal combustion engines.

IPC 1-7

G01N 27/407; G01N 27/406

IPC 8 full level

G01N 27/409 (2006.01); **F01N 11/00** (2006.01); **G01N 27/406** (2006.01); **G01N 27/407** (2006.01); **G01N 27/416** (2006.01)

CPC (source: EP)

F01N 11/00 (2013.01); **G01N 27/4067** (2013.01); **G01N 27/4075** (2013.01); **F01N 2550/02** (2013.01); **Y02T 10/40** (2013.01)

Citation (search report)

See references of WO 9525277A1

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

DE 4408504 A1 19950921; AU 1754295 A 19951003; CN 1124522 A 19960612; EP 0698208 A1 19960228; JP 3553073 B2 20040811;
JP H08510840 A 19961112; WO 9525277 A1 19950921

DOCDB simple family (application)

DE 4408504 A 19940314; AU 1754295 A 19950228; CN 95190189 A 19950228; DE 9500255 W 19950228; EP 95910421 A 19950228;
JP 52376495 A 19950228