

Title (en)
SOLID ELECTROLYTE GAS SENSOR

Title (de)
FESTELEKTROLYT-GASMESSFÜHLER

Title (fr)
CAPTEUR DE GAZ A ELECTROLYTE SOLID

Publication
EP 1438572 A2 20040721 (DE)

Application
EP 02781128 A 20021004

Priority
• DE 0203770 W 20021004
• DE 10151328 A 20011017

Abstract (en)
[origin: WO03036281A2] A gas sensor for the determination of at least one physical parameter of a gas, in particular the exhaust gases of an internal combustion engine, is disclosed, comprising a sensor element (10, 110) with an electrochemical cell. The electrochemical cell comprises a first solid electrolyte body (21, 121), on which a first electrode (41, 141, 241) and a second electrode (42, 142) are mounted. The first and the second electrodes (41, 141, 241, 42, 142) are electrically connected through the first solid electrolyte body (21, 121). The first electrode (41, 141, 241) is in contact with the gas. The surface of the first electrode (41, 141, 241) is smaller than the surface of the second electrode (42, 142).

IPC 1-7
G01N 27/407

IPC 8 full level
G01N 27/407 (2006.01); **G01N 27/419** (2006.01); **G01N 27/409** (2006.01); **G01N 27/41** (2006.01); **G01N 33/00** (2006.01)

CPC (source: EP US)
G01N 27/4075 (2013.01 - EP US); **G01N 27/419** (2013.01 - EP US); **G01N 27/4071** (2013.01 - EP US)

Citation (search report)
See references of WO 03036281A2

Citation (examination)
• DE 4311985 A1 19941013 - MANNESMANN AG [DE]
• DE 8815370 U1 19900412
• DE 4340875 A1 19950608 - BOSCH GMBH ROBERT [DE]

Designated contracting state (EPC)
DE ES FR GB

DOCDB simple family (publication)
WO 03036281 A2 20030501; WO 03036281 A3 20031009; DE 10151328 A1 20030528; DE 10151328 B4 20050504; EP 1438572 A2 20040721; JP 2005506548 A 20050303; JP 4532113 B2 20100825; US 2005034986 A1 20050217; US 7445699 B2 20081104

DOCDB simple family (application)
DE 0203770 W 20021004; DE 10151328 A 20011017; EP 02781128 A 20021004; JP 2003538728 A 20021004; US 49319904 A 20040928