

Title (en)

SENSOR ELEMENT FOR DETERMINING A PHYSICAL PROPERTY OF A TEST GAS

Title (de)

SENSORELEMENT ZUR BESTIMMUNG EINER PHYSIKALISCHEN EIGENSCHAFT EINES MESSGASES

Title (fr)

ELEMENT CAPTEUR POUR DETERMINER UNE PROPRIETE PHYSIQUE D'UN GAZ DE MESURE

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Application

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Abstract (en)

[origin: WO2005121764A1] The invention relates to a sensor element for determining a physical property of a test gas, especially the pressure or the concentration of a gas constituent in a gas mixture, especially in the exhaust gas of an internal combustion engine, said sensor element comprising an electrode (12) which is exposed to the test gas, and a reference electrode (14) which is exposed to a reference gas, especially the surrounding atmosphere, through a porous volume (20). The two electrodes (12, 14) are separated by a solid electrolyte (111). In order to avoid the reference electrode (14) from ageing prematurely as a result of deposits of foreign substances contained in the reference gas or chemical interactions caused by the foreign substances, the volume material is selected in terms of the physical and chemical properties thereof in such a way that the foreign substances are absorbed therein (21) and/or subjected to a chemical reaction.

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