

Title (en)
OPTICAL GAS SENSOR

Title (de)
OPTISCHER GASSENSOR

Title (fr)
CAPTEUR DE GAZ OPTIQUE

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Application
EP 10795002 A 20101220

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Abstract (en)
[origin: WO2011091912A1] The invention relates to a gas sensor for determining the concentration of one or more gas species, in particular in the exhaust gas of an internal combustion engine, comprising a measuring cell (1) having a gas inlet (I), a gas outlet (II), a catalysis region (K1) and an analysis region (A1), wherein the catalysis region (K1) is disposed on the gas inlet side of the analysis region (A1), a catalyst (2) for catalysing a reaction of a first gas species to form a second gas species in the catalysis region (K1), and a gas analyser (3) for the spectroscopic measurement of the concentration of the second gas species in the analysis region (A1). A first gas species, the absorption and/or scatter wavelength(s) of which lie outside of the emission wavelength range of currently available semiconductor radiation sources, for example nitrogen monoxide or ammonia, can be converted by the catalyst (2) into a second gas species, for example nitrogen dioxide, the absorption and/or scatter wavelength(s) of which lie within the emission wavelength range of currently available semiconductor radiator sources, so that the gas analyser can have a semiconductor radiation source. The invention also relates to a method for determining the concentration of one or more gas species, in particular in the exhaust gas of an internal combustion engine.

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See references of WO 2011091912A1

Citation (examination)
• US 6791689 B1 20040914 - WECKSTROEM KURT P [FI]
• DE 10243014 A1 20040318 - BOSCH GMBH ROBERT [DE]
• DE 102004015439 A1 20050623 - BOSCH GMBH ROBERT [DE]

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