

Title (en)

PROBE SUITABLE FOR MEASURING THE COMPOSITION OF AN OXIDISING GAS

Title (de)

SONDE ZUR MESSUNG DER ZUSAMMENSETZUNG EINES OXIDIERENDEN GASES

Title (fr)

SONDE ADAPTEE POUR LA MESURE DE LA COMPOSITION D'UN GAZ COMBURANT

Publication

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Application

EP 19835689 A 20191119

Priority

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Abstract (en)

[origin: WO2020104750A1] The invention relates to a probe comprising a spectrometer (4) suitable for measuring the composition of an oxidising gas after analysis of at least one portion (F13) of a light beam having interacted with said gas, said spectrometer comprising: a light source (40) suitable for emitting a light beam (F), an optical device comprising optical elements (50) which are configured: to guide, towards the gas (G) to be analysed, at least one portion (F11) of the light beam, and to guide, towards a detector (41), a portion (F13) of the light beam having interacted with the gas (G), wherein: the probe (S) comprises a cage (12) suitable for being removably installed inside a channel (C) through which the gas (G) to be analysed flows, the cage (12) being configured to permit a flow of the gas through said cage, at least one portion (F11, F12) of the light beam propagating through the cage (12) so as to be able to interact with the gas (G), the cage (12) serving as holder for an optical reflector (51) suitable for reflecting, towards the detector (41), the portion (F11, F12) of the light beam that propagates through said cage and that has interacted with the gas (G), characterised in that the cage (12) is formed by an elongate tube the sidewall of which contains apertures (120) distributed over the perimeter of the wall and configured to allow the gas to pass radially through said tube, the combined area of said apertures representing more than 50% of the area of the wall of said tube, and preferably more than 80%.

IPC 8 full level

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