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(21) International Application Number: PCT/SE99/00145 (22) International Filing Date: 4 February 1999 (04.02.99) (30) Priority Data: 9800462-5 17 February 1998 (17.02.98) SE (71)(72) Applicants and Inventors: MARTIN, Hans, Göran, Evald [SE/SE]; Östansjö 2837, S-820 60 Delsbo (SE). ÖHMAN, Per, Ove [SE/SE]; Asplunda, Uppsala-Näs, S-755 91 Uppsala (SE). (74) Agent: LINDBLOM, Erik, J.; Flotthamn, S-150 23 Enhörna (SE).			(81) Designated States: AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: A METHOD OF PRODUCING A DETECTOR BELONGING TO A GAS SENSOR, AND A DETECTOR PRODUCED IN ACCORDANCE WITH THE METHOD

(57) Abstract

The present invention relates to a method of producing a gas sensor co-acting detector intended for the detection of electromagnetic waves, such as infrared light rays, that pass through a gas cell. The gas cell (2) includes a cavity (21), which functions to enclose a gas volume (G) for measuring or evaluating purposes. The surface or parts of the surface forming walls within the gas cell or the cavity is/are coated with one or more different metal layers (M1, M2) with the intention of providing a highly reflective surface for reflection of said electromagnetic waves. The detector (3) is comprised of a thermal element and is formed on a base structure (31). That part of the base structure that shall form said detector is comprised of one or more topographically structured surface regions. At least said surface region or surface regions is/are coated with a first and a second electrically conductive metal layer (M1 and M2 respectively) which are intended to form said thermocouple. The first metal layer (M1) is applied at a first angle other than 90°, and the second metal layer (M2) is applied at a second angle which is also other than 90° and which differs from the first angle. The topographical structure and/or configuration including the thus coated electrically conductive layers provides the function of one or more thermocouples, by virtue of the first and the second metal layers (M1, M2) overlapping each other within discrete detector-associated surface parts.

