

ABSTRACT

G00002

AN IMPROVED TEMPERATURE COMPENSATED ELECTROCHEMICAL
GAS SENSOR AND METHOD FOR CLOSELY TRACKING THE
TEMPERATURE VARIATIONS OF A GAS TO BE SENSED

An Electrochemical Gas Sensor having a temperature sensitive element such as a thermistor arranged within the gas sensor in a temperature insulative fashion for preventing any variations in the temperature of the applied gases to be sensed to be immediately conveyed to the temperature sensitive element thereby providing accurate temperature compensation signals to be combined with the generated sensor electrical output signals. The temperature sensitive element or thermistor is mounted in a heat sink to the expansion membrane of the gas sensor to be responsive only to changes in the temperature variations imparted by the sensor electrolyte and not by the variations in the temperature of the gas sensor body and associated elements thereby providing correct temperature compensation signals without error producing time delays.

Figure 3

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