

ABSTRACT

A gas detection sensor of simplified construction that permits precise measurement of the concentration of flammable gas in the detection gas or subject gas and the concentration of oxygen gas in the detection gas containing flammable gases. The gas detection sensor according to the present invention in which the heating of the sensor by the contact catalytic reaction of flammable gas gives off the detection signal of the flammable gas, and which comprises a first detection sensor which includes a diaphragm having a platinum coat on the side with which the flowing detection gas comes in contact and a thermocouple having the one ends of two different kinds of metals placed close to each other and fixed on the reverse side of the diaphragm not coming in contact with the flowing detection gas and which is heated by the contact catalytic reaction of flammable gas, and a second detection sensor which includes a diaphragm having a surface coming in contact with the flowing detection gas and a thermocouple having the one ends of two different kinds of metals placed close to each other and fixed on the reverse side of the diaphragm not coming in contact with the flowing detection gas and which detects the temperature of the flowing detection gas.