

PRESSURE SENSOR

ABSTRACT OF THE DISCLOSURE

One or more reactive gases are introduced to a capacitance manometer at a particular area or areas between the inner and outer capacitive electrodes so the error-inducing measurement effects of positive and negative bending is neutralized or minimized. Additionally, a guard structure may be used for the electrode structure of the capacitance manometer. The guard structure presents an area that is relatively insensitive to the diffusion of the gas into the diaphragm and the resulting changing surface tension, curvature and deflection, thus providing increased or optimal stability of the zero reading and pressure reading of the manometer. The guard may also provide electrostatic isolation of the electrodes.

FIGURE 5