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(54) Title: CAPACITIVE PRESSURE SENSOR WITH IMPROVED ELECTRODE STRUCTURE

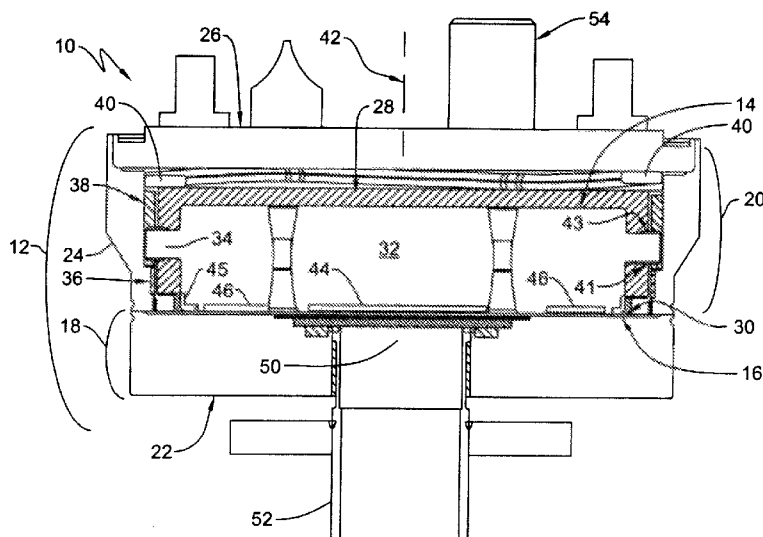


FIG. 1

(57) Abstract: An improved capacitive manometer, the manometer comprises: (a) a diaphragm including a common electrode and (b) an electrode structure including a center electrode and ring electrode, wherein the diaphragm is movable relative to the electrode structure between (i) a zero position when the pressure on each side of the diaphragm is the same and (ii) a maximum differential position when the maximum measurable differential pressure is applied to the diaphragm; and a diaphragm support structure arranged so as to support the diaphragm so that the diaphragm is constrained relative to the electrode structure, and the common electrode is spaced from and axially aligned with the center and ring electrodes relative to an alignment axis of the manometer; and an electrode support structure arranged to support the electrode structure and comprising a compliant ring including at least three flexures integrally formed in the ring and angularly spaced around the alignment axis; wherein the electrode support is clamped in place relative to the diaphragm at the locations of the compliant ring flexures.