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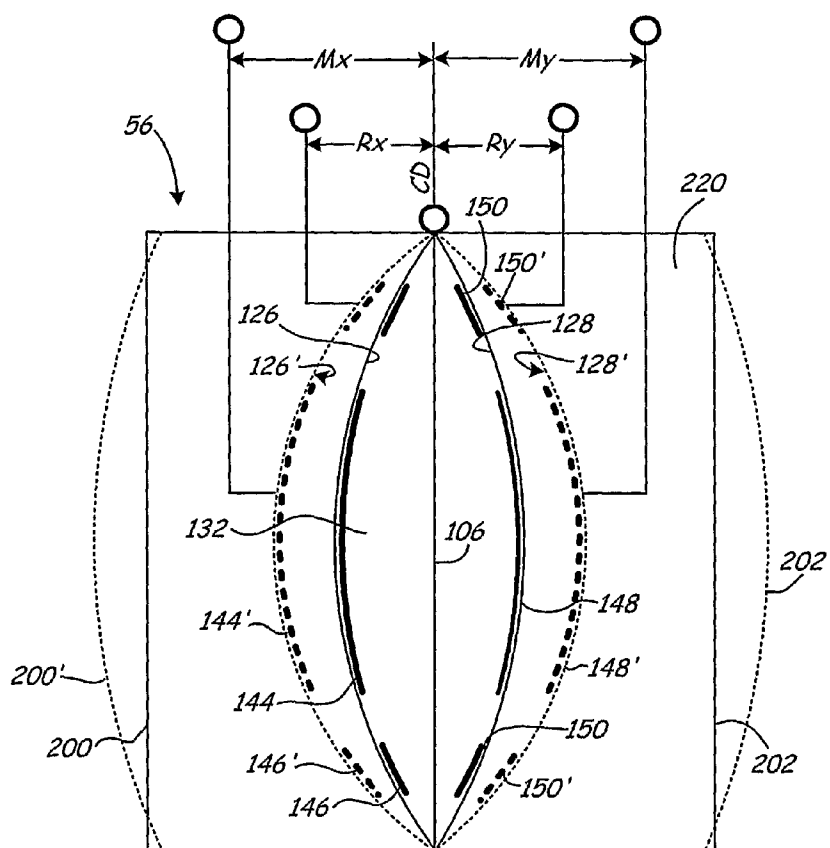
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(54) Title: LINE PRESSURE MEASUREMENT USING DIFFERENTIAL PRESSURE SENSOR



(57) Abstract: A pressure sensor assembly (56) for sensing a pressure of a process fluid includes a sensor body (220) having a cavity (132, 134) formed therein to couple to a process fluid pressure. A deflectable diaphragm (100) in the cavity deflects in response to the first and second process fluid pressures. A first primary electrode (144) couples to a wall (126) of the cavity and forms a first primary capacitor (Mx) between the first primary electrode and the deflectable diaphragm. A first secondary electrode (146) couples to the wall of the cavity to form a first secondary capacitor (Rx) between the first secondary electrode and the deflectable diaphragm. A second primary electrode (148) and second secondary electrode (150) are preferably coupled to a wall (128) of the cavity opposite the first. Line pressure of the process fluid is determined based upon variation in the secondary capacitors relative to the primary capacitors.



FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,
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