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Cuomo

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- [54] **OPTICAL FIBER PRESSURE SENSOR FOR LIQUID LEVEL MONITORING**
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[57] ABSTRACT

An apparatus for continuously monitoring changes in a liquid level in accordance with a differential pressure is provided. A sensor body immersed in the liquid supports two thin-filmed metallic diaphragms that are independently, axially responsive to pressure of the liquid. Each diaphragm has a different modulus of elasticity. Two fiber optic pressure sensors are mounted within an air space encased by the sensor body in combination with the two diaphragms. Each of the two fiber optic pressure sensors detects the axial response of one of the two diaphragms. The displacement difference between the two diaphragms is an indication of differential pressure related to the liquid level.

- [56] **References Cited**
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12 Claims, 3 Drawing Sheets

