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(54) Title: UNIFIED SYSTEM FOR PRESSURE AND FLOWRATE MEASUREMENT

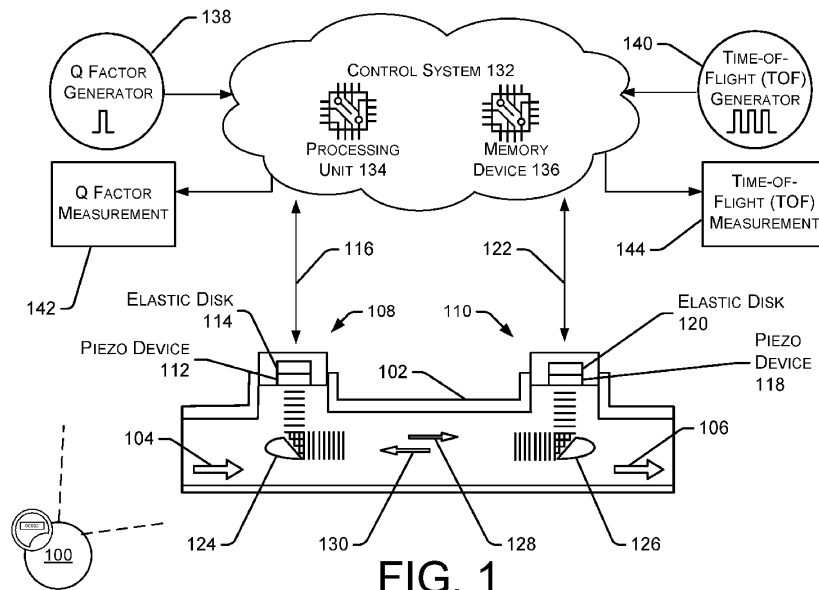


FIG. 1

(57) Abstract: Techniques to provide a unified system for fluid pressure and fluid flowrate measurement are described. Upstream and downstream transducers include piezo devices, and are in contact with a fluid flow, such as in a pipe within a metering device. In an example, a first signal is sent from the upstream transducer to a downstream transducer, and time-of-flight of the first signal is measured. A second signal is sent from the downstream transducer to the upstream transducer, and a time-of-flight of the second signal is measured. A flowrate of the fluid flowing within the passage is calculated, based on the times of flight of the first and second signals. An electrical signal is sent to the first transducer. Upon conclusion of the electrical signal, a pressure of the fluid flowing within the passage is calculated, based at least in part on time of decay of a second electrical signal generated by vibration of the first transducer.

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