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(54) Title: A PRESSURE DIFFERENTIAL FLOW METER INCLUDING A CONSTRICTION DEVICE THAT CAN CREATE MULTIPLE AREAS OF CONSTRICTION

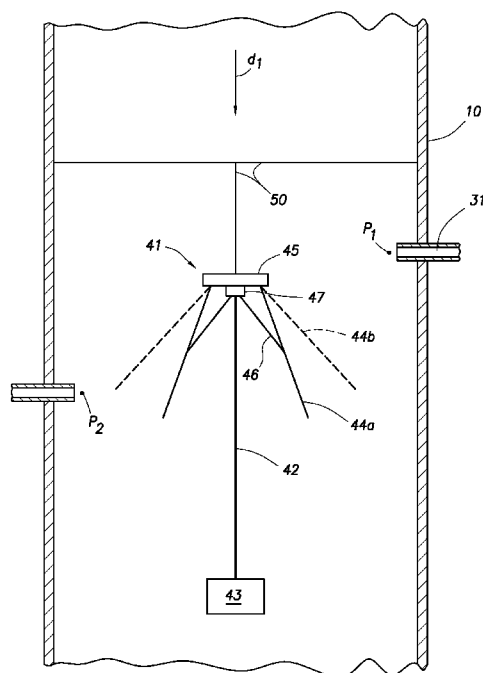


FIG. 3

(57) Abstract: According to another embodiment, a method of determining the flow rate of a fluid using the pressure differential flow meter comprises: flowing the fluid through the flow meter, wherein the flow meter comprises: (A) the constriction device, (i) wherein the constriction device is capable of creating at least a first area of constriction and a second area of constriction; (a) wherein the first area of constriction has a cross-sectional area that is less than the cross-sectional area of the second area of constriction; (b) wherein the pressure differential is within a range when the fluid velocity flowing through the first area of constriction is within a first fluid velocity range and when the fluid velocity flowing through the second area of constriction is within a second fluid velocity range; and (c) wherein as the fluid velocity through the first area of constriction increases to about the maximum velocity of the first fluid velocity range, the constriction device creates the second area of constriction; and (d) wherein as the fluid velocity through the second area of constriction decreases to about the minimum velocity of the second fluid velocity range, the constriction device creates the first area of constriction; and (B) a flow rate computing device. According to another embodiment, a pressure differential flow meter comprises the constriction device.

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