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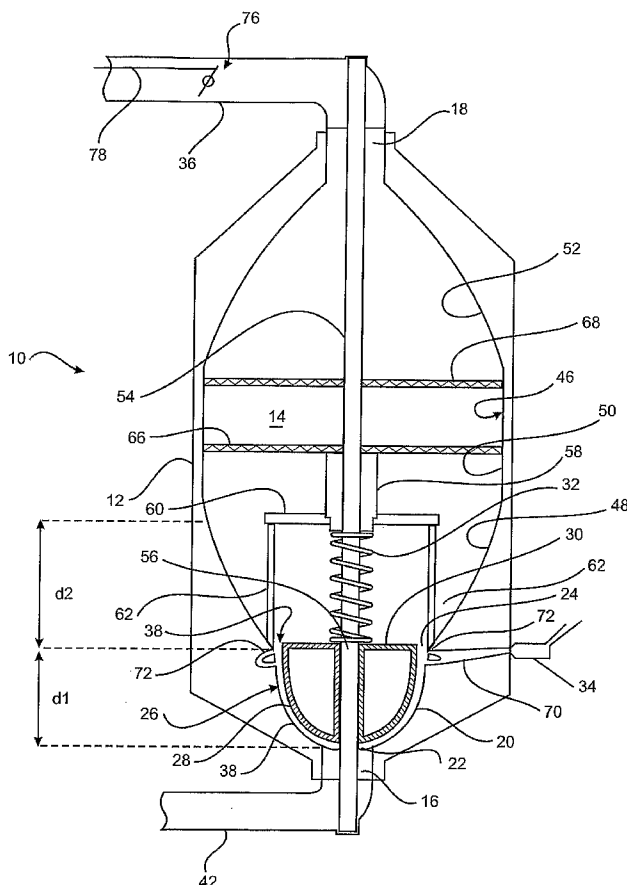
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(54) Title: FUEL CONDITIONING APPARATUS



(57) Abstract: A fuel conditioning system (10) comprises a housing (12) defining a chamber (14) and provided with an inlet (16) upstream of the chamber (14) and an outlet (18) downstream of the chamber (14). A hemispherical seat (20) is formed in the housing (10) with a first end (22) in communication with the inlet (16), and a second end (24) in communication with the chamber (14). A valve body (26) is received within the seat (20) and comprises a curved surface (28) and a planar surface (30) that extends across the curved surface (28). The valve body (26) is moveable between a closed position where the valve body (26) seals the inlet (16) and an open position where the valve body is spaced from the inlet (16) to allow air to flow through the first end (22) between the seat (20) and curved surface (28), and through a gap (38) formed between the second end (24) and an adjacent portion of the valve body (26), into the chamber (14). A spring (32) biases a valve body at a pressure of approximately one atmosphere toward the closed position.

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