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(54) Title: INDUCED-GAS FLOTATION CELL WITH HORIZONTAL FLOW

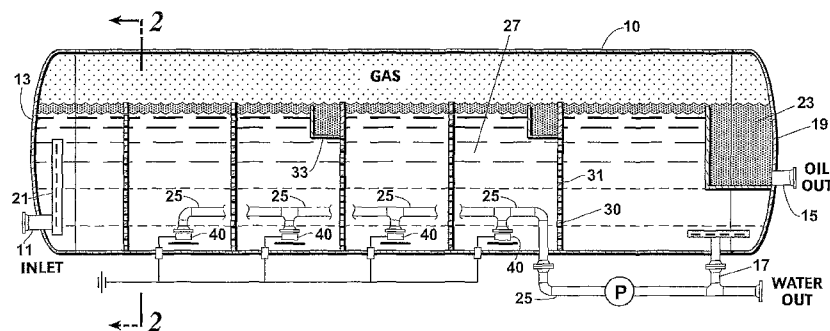


Fig. 1

(57) Abstract: An improved induced-gas separation vessel made according to this invention and method for its use includes an elongated, horizontally oriented vessel having compartments defined by adjacent pairs of perforated baffles which span the width but not the height of the vessel. One or more gas eductors are located within each compartment. An inlet device controls the momentum or velocity of the incoming water stream and rapidly converts it to horizontal flow prior to it encountering the first perforated baffle. The design of each baffle is such that the flow of water through each perforated baffle is a laminar or smooth flow without any change in direction. By controlling incoming velocity and providing perforated baffles, water distribution within the vessel is increased as is volumetric utilization. The total volumetric use of the vessel is at least 50% and can be as great as 80%.