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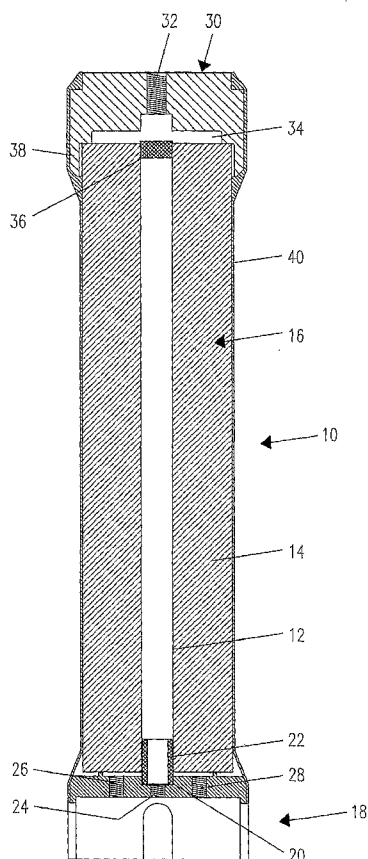
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(54) Title: THE SEPARATION OF SOLID PARTICLES FROM THE LIQUID IN WHICH THEY ARE DISPERSED



(57) Abstract: An upright filter unit (10) is disclosed which comprises a membrane (16) consisting of a perforated, vertical permeate pipe (12) and a plurality of leaves (14) of semipermeable material which permits water to pass through it. The semi-permeable material defines a plurality of solids retention passages and a plurality of permeate passages. The leaves (14) are wound around the perforated vertical pipe (12) into which the permeate water flows, the membrane being inside a casing (40). An inlet (24) at the bottom of the unit allows raw water under pressure to flow to the solids retention passages of the membrane. An air inlet (32) at the upper end of the unit permits air under pressure to enter the upper end of the unit, and hence the upper ends of the solids retention passages, until the air and water pressures are balanced. Flushing of retained solids is achieved by closing the outlet from the perforated pipe and opening both a flushing water inlet and a flushing water outlet whilst maintaining air pressure at the upper end of the casing.

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