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(54) Title: METHOD OF PRODUCING PURIFIED WATER AND APPARATUS THEREFOR

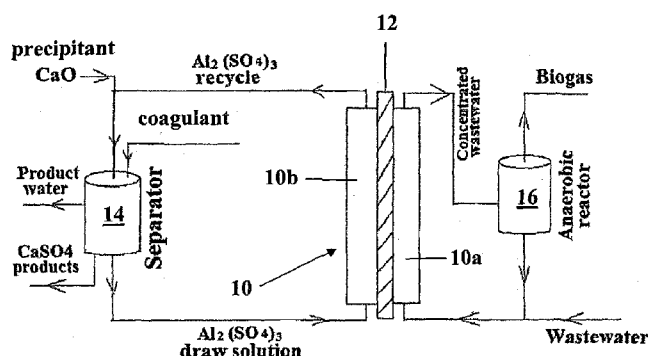


Fig. 1

(57) Abstract: A method of producing purified water from a water source which is suspected to contain impurities is disclosed. The method comprises: (a) contacting the water source with a draw solution, wherein the water source and the draw solution are separated by a semipermeable membrane that is permeable for water but essentially impermeable for solutes contained in the water and wherein the draw solution contains a chemically precipitable water-soluble salt in a concentration that allows the draw solution to draw water from the water source by osmosis; (b) allowing water from the water source to flow through the semipermeable membrane to the draw solution, thereby diluting the draw solution and concentrating the water source; (c) producing purified water from the diluted draw solution by: (i) adding a precipitant to the diluted draw solution to precipitate the salt, wherein the precipitated salt thus formed comprises a plurality of gel particles dispersed in water; (ii) adding a coagulant to the plurality of gel particles to coagulate the plurality of gel particles; and (iii) separating the coagulated gel from the water.