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(54) Title: LIQUID SEPARATION SYSTEM

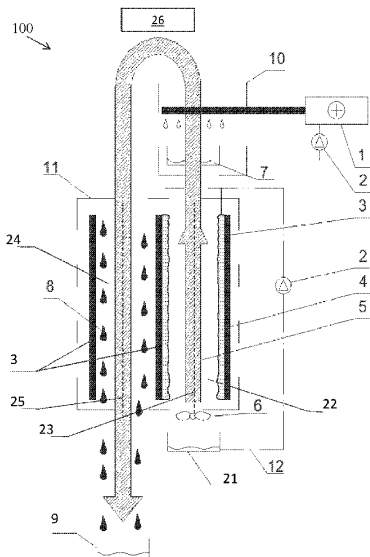


FIG. 1

(57) Abstract: A separation system separates a first liquid from a compound liquid. Examples of the compound liquid are seawater, brine, rainwater, wastewater, biofuel precursors, lactic acid, or fruit juice. A plate heat exchanger includes at least one evaporation channel and at least one condensation channel where the first liquid evaporates from the compound liquid into a gas. A direct heat exchanger further evaporates the first liquid into the gas. The gas flows from the direct heat exchanger through the condensation channel where the first liquid condenses and is thereby separated from the compound liquid.

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