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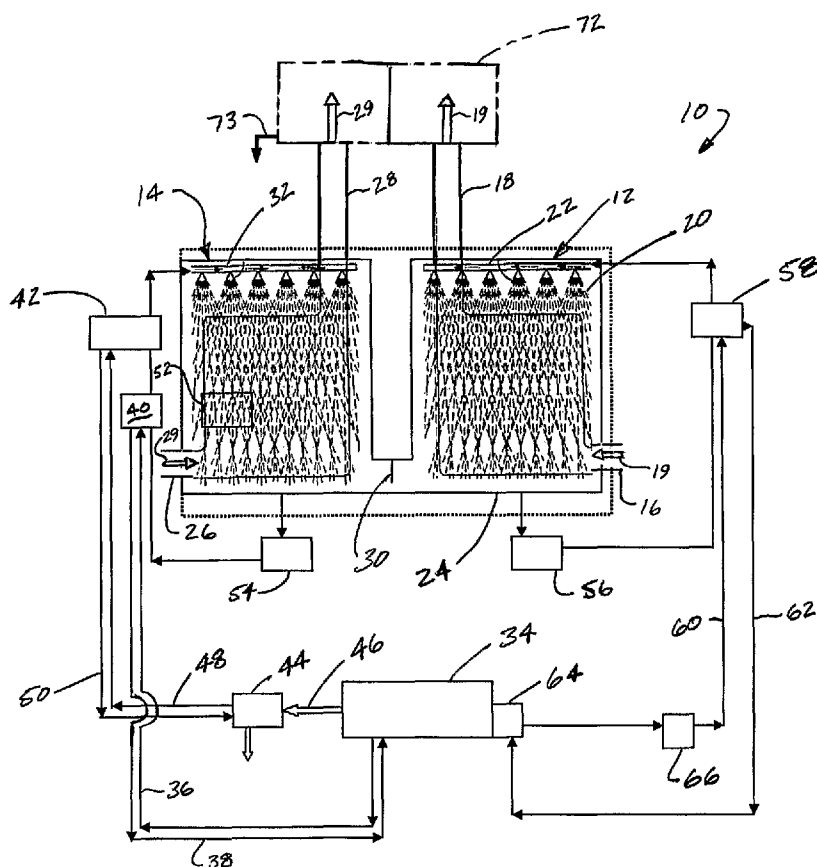
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(54) Title: SYSTEM AND METHOD FOR MANAGING WATER CONTENT IN A FLUID



(57) Abstract: A system and method for managing water content in a fluid includes a collection chamber for collecting water from the fluid with a desiccant, and a regeneration chamber for collecting water from the desiccant. An evaporator is used to cool the collection chamber, and a compressor is used to compress refrigerant flowing through the evaporator. An engine powers the compressor, and also provides waste heat to the regeneration chamber to increase the amount of water expelled from the desiccant. Water from the desiccant is evaporated in air flowing through the regeneration chamber. Air leaving the regeneration chamber is cooled to extract the water for drinking or other uses.