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(54) Title: LIQUID DESICCANT AIR CONDITIONING USING AIR AS HEAT TRANSFER MEDIUM

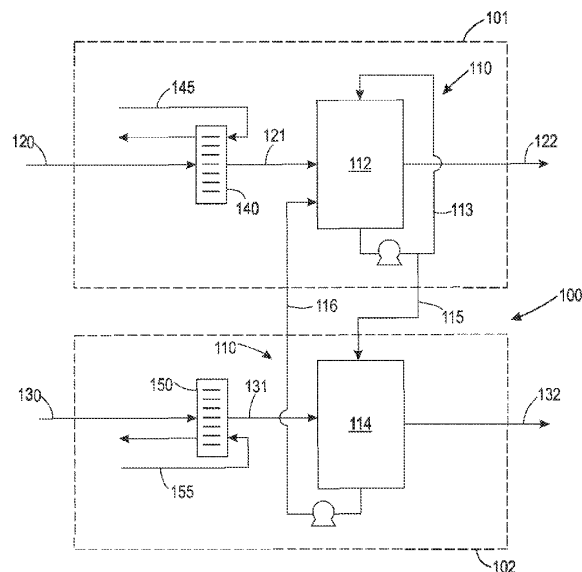


FIG. 1

(57) Abstract: A liquid desiccant system includes a liquid desiccant loop having an absorber unit in fluid communication with a desorber unit and liquid desiccant flowing between the absorber unit and the desorber unit. The liquid desiccant system includes a supply airflow path passing through the absorber unit and forming an absorber liquid/air interface within the absorber unit and a conditioned airflow exiting the absorber unit. The liquid desiccant system includes a regeneration airflow path passing through the desorber unit and forming a desorber liquid/air interface within the desorber unit and an exhaust airflow exiting the desorber unit. A heat exchanger is thermally coupled to the supply airflow path for removing heat from supply airflow upstream of the absorber unit. A heat exchanger is thermally coupled to the regeneration airflow path adding heat to regeneration airflow upstream of the desorber unit.

[Continued on next page]

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