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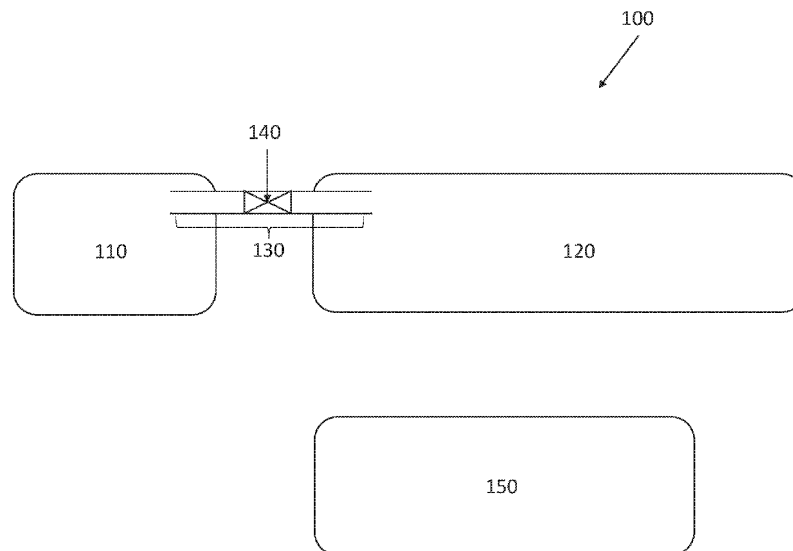
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(54) Title: THERMAL REGULATION SYSTEM

FIG. 1



(57) **Abstract:** A sorption heat pump having an evaporator containing a working fluid to evaporate the fluid to produce a gas, a sorber containing a sorption material to sorb the gas during a sorption phase, a vapor pathway connecting the evaporator and sorber, and a thermal control unit controlling the rate of vapor flow between the evaporator and sorber through the pathway, and being selectively operable to permit, stop and restart the flow of gas through the pathway. The pump may be used with a compartment storing temperature sensitive material. The evaporator may be positioned inside and the sorber outside the compartment, or the sorber may be positioned inside and the evaporator outside the compartment. The pump may be used in an apparatus including both cool and warm compartments, with an insulation layer in each. A method is disclosed for reusing the pump after the sorption material has been sorbed.

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