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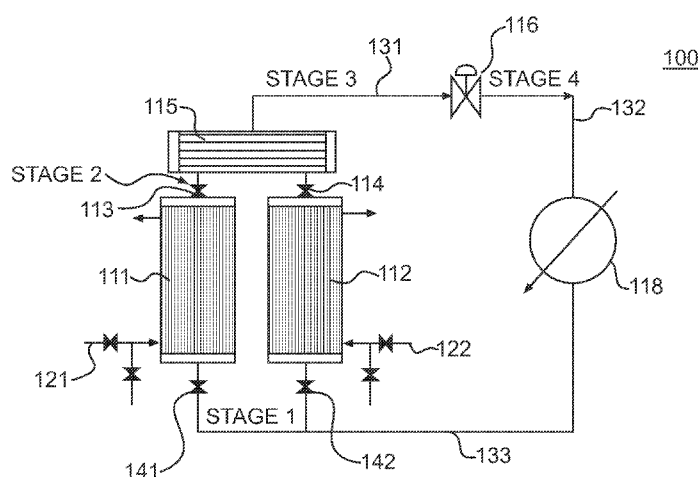
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(54) Title: SYSTEMS AND METHODS FOR GENERATING POWER AND CHILLING USING UNUTILIZED HEAT

**FIG. 1**

(57) Abstract: The present application provides a sorption system for generating power and chilling that includes at least one absorber to absorb a working fluid in a liquid sorbent, a pump in fluid communication with the absorber to yield a feed of pressurized liquid sorbent and absorbed working fluid, a heat source to heat the feed of pressurized liquid sorbent and absorbed working fluid to yield a feed of working fluid at a supercritical state, a generator in fluid communication with the feed of working fluid at a supercritical state to yield power and a feed of working fluid in an at least partially condensed state, and an evaporator in fluid communication with the feed of working fluid in the at least partially condensed state to yield chilling and uncondensed working fluid. Additional systems and method for the generating power and chilling are provided.