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(54) Title: LIQUID VAPOR SEPARATION IN TRANSCRITICAL REFRIGERANT CYCLE

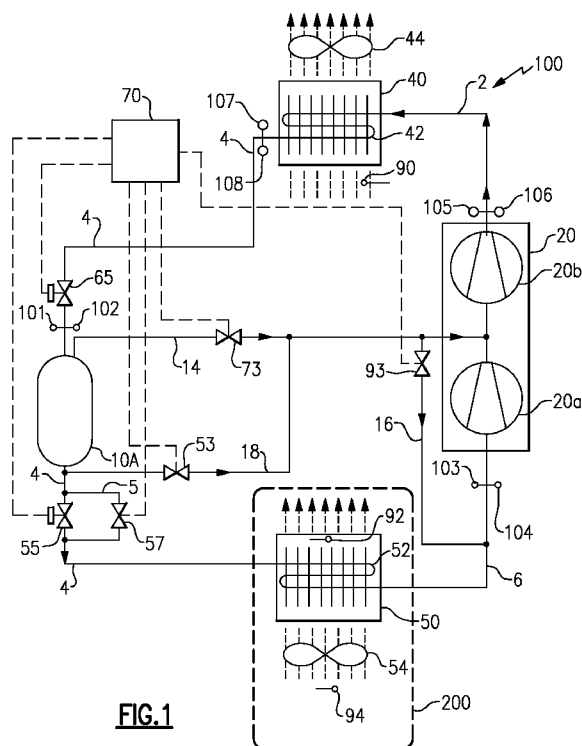


FIG.1

(57) Abstract: A refrigerant vapor compression system includes a flash tank disposed in the refrigerant circuit intermediate a refrigerant heat rejection heat exchanger and a refrigerant heat absorption heat exchanger. The flash tank has a shell defining an interior volume having an upper chamber, a lower chamber and a middle chamber. A first fluid passage establishes fluid communication between the middle chamber and the upper chamber and a second fluid passage establishing fluid communication between the middle chamber and the lower chamber. An inlet port opens to the middle chamber. A first outlet port opens to the upper chamber and a second outlet port opens to the lower chamber.

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