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- (54) **Title:** REFRIGERANT VAPOR COMPRESSION SYSTEM WITH INTERCOOLER

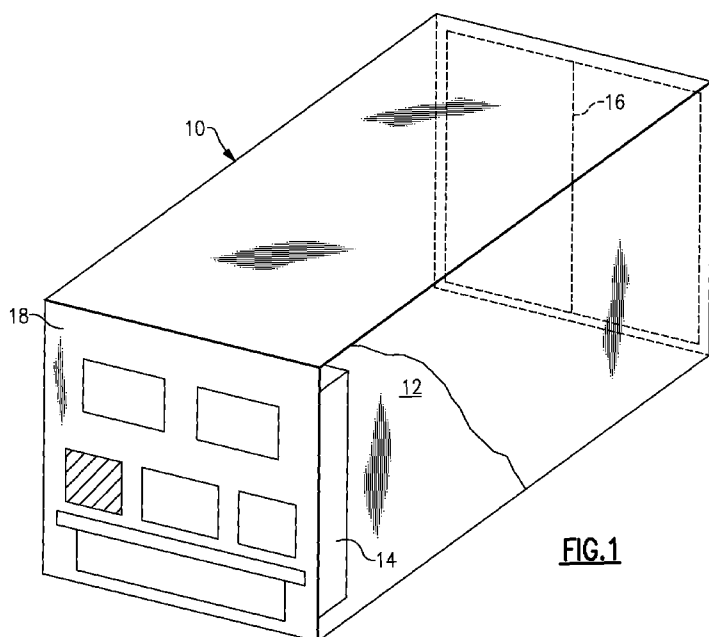


FIG. 1

(57) **Abstract:** A refrigerant vapor compression system includes a compression device having at least a first compression stage and a second compression stage, a refrigerant heat rejection heat exchanger disposed downstream with respect to refrigerant flow of the second compression stage, and a refrigerant intercooler disposed intermediate the first compression stage and the second compression stage. The refrigerant intercooler is disposed downstream of the refrigerant heat rejection heat exchanger with respect to the flow of a secondary fluid. A second refrigerant heat rejection heat exchanger may be disposed downstream with respect to refrigerant flow of the aforesaid refrigerant heat rejection heat exchanger, and a second refrigerant intercooler may be disposed intermediate the first compression stage and the second compression stage and downstream with respect to refrigerant flow of the aforesaid refrigerant intercooler.

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