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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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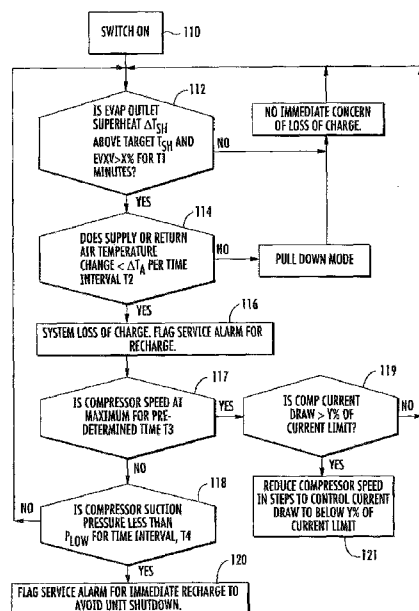
(54) Title: METHOD FOR DETECTION OF LOSS OF REFRIGERANT

FIG. 5

(57) **Abstract:** A method is provided for detecting in real-time a refrigerant charge loss in a refrigerant vapor compression system. If both a sensed evaporator outlet superheat exceeds a target evaporator outlet superheat by at least a preset amount of superheat and a sensed degree of openness of an electronic expansion valve exceeds a preset degree of openness for a preset time of period, and a sensed air temperature of either a flow of supply air having traversed the evaporator or a flow of return air returning to the evaporator is changing at a rate less than preset air temperature rate of change, a service alarm is generated indicating a loss of charge warning.



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