

Title (en)

METHOD OF OPERATING A VAPOUR COMPRESSION CYCLE UNDER TRANS- OR SUPERCRITICAL CONDITIONS

Title (de)

VERFAHREN ZUM BETRIEB EINES KALTDAMPFPROZESSES UNTER TRANS- ODER ÜBERKRITISCHEN BEDINGUNGEN

Title (fr)

PROCEDE POUR OPERER UN CYCLE DE CARNOT RENVERSE EN CONDITIONS TRANSCRITIQUES OU SUPERCRITIQUES

Publication

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Application

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Priority

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Abstract (en)

[origin: WO9007683A1] The present invention involves the regulation of specific enthalpy at evaporator inlet by deliberate use of the pressure and/or temperature before throttling for capacity control. Capacity is controlled by varying the refrigerant enthalpy difference in the evaporator, by changing the specific enthalpy of the refrigerant before throttling. In the super-critical state this can be done by varying the pressure and temperature independently. In a preferred embodiment this modulation of specific enthalpy is done by varying the pressure before throttling. The refrigerant is cooled down as far as it is feasible by means of the available cooling medium, and the pressure regulated to give the required enthalpy. Another embodiment involves modulation of enthalpy by variation of the refrigerant temperature before throttling. This is done by controlling the heat rejection from the device.

IPC 1-7

F25B 1/00

IPC 8 full level

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IPC 8 main group level

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CPC (source: EP KR US)

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