

Title (en)
SUB-AMBIENT REFRIGERATING CYCLE

Title (de)
UNTER UMGEBUNGSTEMPERATUR ARBEITENDER KÜHLZYKLUS

Title (fr)
CYCLE FRIGORIFIQUE SUB-ATMOSPHERIQUE

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Application
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Abstract (en)
[origin: US2005274139A1] According to one embodiment of the invention, a method for cooling heat-generating structure disposed in an environment having an ambient pressure includes providing a fluid refrigerant and reducing a pressure of the refrigerant to a first sub-ambient pressure at which the refrigerant has a boiling temperature less than a temperature of the heat-generating structure. The method also includes bringing the refrigerant at the first sub-ambient pressure into thermal communication with the heat-generating structure, so that the refrigerant boils and vaporizes to thereby absorb heat from the heat-generating structure. The method further includes increasing a pressure of the vaporized refrigerant above the first sub-ambient pressure to a second sub-ambient pressure.

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