

Title (en)  
HEAT MEDIUM CIRCULATION SYSTEM

Title (de)  
SYSTEM FÜR HITZEMEDIUMZIRKULATION

Title (fr)  
SYSTÈME DE CIRCULATION DE MILIEU THERMIQUE

Publication  
**EP 3477221 B1 20200129 (EN)**

Application  
**EP 16906300 A 20160623**

Priority  
JP 2016068700 W 20160623

Abstract (en)  
[origin: EP3477221A1] Provided is a heat medium cycle system capable of being continuously operated while a heat medium is being prevented from freezing in a heat medium heat exchanger by using a pressure difference of the heat medium obtained from a measurement value of an inlet pressure sensor provided at an inlet of the heat medium heat exchanger and a measurement value of an outlet pressure sensor provided at an outlet of the heat medium heat exchanger. The heat medium cycle system includes a refrigeration cycle circuit, a heat medium cycle circuit, an inlet temperature sensor, the inlet pressure sensor, the outlet pressure sensor, an evaporating temperature sensor, and a controller. Under a first condition where the heat medium is to freeze in the heat medium heat exchanger, the controller is configured to obtain a minimum on-state flow rate at which the heat medium is kept from freezing in the heat medium heat exchanger, on the basis of a temperature of the heat medium at a heat medium inlet measured by the inlet temperature sensor and an evaporating temperature of refrigerant detected by the evaporating temperature sensor, and control a pump in such a manner that the minimum on-state flow rate is maintained to make the pressure difference of the heat medium obtained from a measurement value of the inlet pressure sensor and a measurement value of the outlet pressure sensor into a minimum on-state pressure difference.

IPC 8 full level  
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Cited by  
CN113899053A; EP4212795A1; US11408656B2

Designated contracting state (EPC)  
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