

Title (en)

Method for controlling gas pressure in cooling plant

Title (de)

Verfahren zur Steuerung des Gasdrucks in einer Kühlanlage

Title (fr)

Procédé de contrôle de la pression du gaz dans une installation de refroidissement

Publication

EP 2623900 A1 20130807 (EN)

Application

EP 12000707 A 20120202

Priority

EP 12000707 A 20120202

Abstract (en)

A method for monitoring gas pressure in a heat rejecting heat exchanger in a cooling circuit is disclosed. In the heat rejecting heat exchanger, pressure is controlled by means of a control unit, said control unit controlling at least one valve. The present capacity of one or more compressors in the cooling circuit compared to a maximum capacity of the one or more compressors is established. The maximum capacity may be the rated capacity of the compressors, or it may be a maximum capacity under the given circumstances and/or the given operating conditions. If the present capacity of the one or more compressors is at least at a level corresponding to a pre-set percentage of the maximum capacity, a period of time elapsed from a point in time where the compressor capacity reached said level is established. If the established period of time has a duration which is longer than a pre-set period of time, then it is concluding that the cooling medium is in a gas loop operational mode. Detecting a gas loop operational mode in an easy manner allows an operator or a controller to adjust operation of the cooling plant in such a manner that the cooling medium is brought out of the gas loop operational mode, thereby increasing the energy efficiency of the cooling plant.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [X] DE 102006019082 A1 20061026 - DENSO CORP [JP]
- [X] US 2007089439 A1 20070426 - SINGH ABTAR [US], et al
- [A] EP 1202004 A1 20020502 - CALSONIC KANSEI CORP [JP]

Designated contracting state (EPC)

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Designated extension state (EPC)

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