

Title (en)  
AIR CONDITIONER

Title (de)  
KLIMAANLAGE

Title (fr)  
CLIMATISEUR

Publication  
**EP 4372295 A1 20240522 (EN)**

Application  
**EP 21950181 A 20210715**

Priority  
JP 2021026615 W 20210715

Abstract (en)  
An air-conditioning apparatus includes a compressor, a condenser, a pressure-reducing device, an evaporator, a temperature sensor, and a controller. The controller controls the compressor and the pressure-reducing device to cause a heating operation or a cooling operation to be performed. The controller causes an intermittent operation to be performed, the intermittent operation being an operation in which an operation of the compressor is stopped when a cooling load or a heating load decreases and the operation of the compressor is started when the cooling load or the heating load increases. The controller causes, when the operation of the compressor is performed in the intermittent operation, the intermittent operation to be performed at a lowest frequency set as a lower-limit frequency in a frequency range that is set for the operation of the compressor. The controller has: a first determination value obtained by multiplying by a preset first constant set, a time constant which is a response value required until heating and cooling capacity in refrigerant circulation in a refrigeration cycle circuit is stabilized, and which is a value at a rise of a waveform representing the heating and cooling capacity calculated from a value measured by the temperature sensor; and a second determination value obtained by multiplying the time constant by a preset second constant smaller than the first constant. The controller increases the lowest frequency for a subsequent operation of the compressor, when in the intermittent operation, an intermittent operation time from the start to stop of the compressor is longer than the first determination value, and decreases the lowest frequency for the above subsequent operation, when in the intermittent operation, the intermittent operation time is shorter than the second determination value.

IPC 8 full level  
**F25B 1/00** (2006.01); **F24F 11/47** (2018.01)

CPC (source: EP US)  
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Designated extension state (EPC)  
BA ME

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KH MA MD TN

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