

Title (en)  
REFRIGERATION CYCLE APPARATUS

Title (de)  
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)  
APPAREIL À CYCLE FRIGORIFIQUE

Publication  
**EP 3862649 A4 20220112 (EN)**

Application  
**EP 18936213 A 20181002**

Priority  
JP 2018036849 W 20181002

Abstract (en)  
[origin: EP3862649A1] A refrigeration cycle apparatus includes a refrigerant circuit through which refrigerant is circulated, an economizer circuit branching off from the refrigerant circuit between an intercooler and a main expansion valve or between the intercooler and a condenser and connecting to a compressor via the intercooler, an economizer expansion valve disposed in the economizer circuit, an intermediate pressure sensor configured to detect an intermediate pressure of the refrigerant to be injected into the compressor, a temperature sensor configured to detect a temperature of the refrigerant to be injected into the compressor, a calculating unit configured to calculate an economizer superheat degree that is a difference between a saturated gas temperature corresponding to the detected intermediate pressure and a detection value of the temperature sensor and obtain, on the basis of an operating state of the refrigerant circuit, a target value of the economizer superheat degree, and a flow rate control unit configured to adjust an opening degree of the economizer expansion valve such that the economizer superheat degree matches the target value.

IPC 8 full level  
**F25B 1/00** (2006.01)

CPC (source: EP)  
**F25B 49/02** (2013.01); **F25B 2500/19** (2013.01); **F25B 2600/2509** (2013.01); **F25B 2700/195** (2013.01); **F25B 2700/21163** (2013.01); **F25B 2700/21175** (2013.01)

Citation (search report)

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- [XIY] EP 3124897 B1 20180221 - HONEYWELL SPOL S R O [CZ]
- [X] US 2015033780 A1 20150205 - HATOMURA TAKESHI [JP], et al
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- See also references of WO 2020070793A1

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DOCDB simple family (publication)  
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