

Title (en)  
REFRIGERATION CYCLE DEVICE

Title (de)  
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)  
DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication  
**EP 2746699 A4 20150408 (EN)**

Application  
**EP 11871146 A 20110819**

Priority  
JP 2011004638 W 20110819

Abstract (en)  
[origin: EP2746699A1] A refrigeration cycle apparatus is obtained which allows high accurate estimation of the composition of a refrigerant even when the detection accuracy of a used sensor is the same as that in an existing one. If an error equivalent to that for a first inlet temperature sensor 12 is observed in an outlet temperature TO that is a temperature detected by a first outlet temperature sensor 13, a constant-temperature line in a superheated gas state is sufficiently inclined as compared to a constant-temperature line in a two-phase gas-liquid refrigerant, and an enthalpy error  $\Delta h_{TO}$  caused with the error is sufficiently smaller than that in the case of a temperature sensor 103 in a related art example.

IPC 8 full level  
**F25B 1/00** (2006.01); **F25B 9/00** (2006.01); **F25B 49/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)  
**F25B 9/006** (2013.01); **F25B 49/005** (2013.01); **F25B 2400/01** (2013.01); **F25B 2400/08** (2013.01); **F25B 2400/121** (2013.01); **F25B 2700/1931** (2013.01); **F25B 2700/1933** (2013.01); **F25B 2700/2101** (2013.01); **F25B 2700/21163** (2013.01)

Citation (search report)  
• [I] EP 0693663 A2 19960124 - MITSUBISHI ELECTRIC CORP [JP]  
• See references of WO 2013027232A1

Cited by  
EP3306238A1; EP4160119A4; EP4317840A4

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
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**EP 11871146 A 20110819**; JP 2011004638 W 20110819; JP 2013529778 A 20110819