

Title (en)
Heat pump device

Title (de)
Wärmepumpenvorrichtung

Title (fr)
Dispositif de pompes à chaleur

Publication
EP 2487437 B1 20150805 (DE)

Application
EP 11001131 A 20110211

Priority
EP 11001131 A 20110211

Abstract (en)
[origin: EP2487437A1] The device has an expansion valve (19) arranged in front of an evaporator (3) along flow direction. Oil separators (25, 26) are arranged behind respective compressors (C1, C2) along flow direction and connected with the compressors over respective oil conduits (101, 102) for returning deposited oil to the compressors. The compressors are operated independently. The compressors are bridged by a bypass line (122) or another bypass line in a non-operative state. A check valve (27) is connected upstream to one of the compressors along flow direction.

IPC 8 full level
F25B 1/10 (2006.01); **F25B 30/02** (2006.01); **F25B 31/00** (2006.01); **F25B 13/00** (2006.01)

CPC (source: EP)
F25B 1/10 (2013.01); **F25B 30/02** (2013.01); **F25B 31/004** (2013.01); **F25B 41/39** (2021.01); **F25B 13/00** (2013.01); **F25B 2339/047** (2013.01); **F25B 2400/0401** (2013.01); **F25B 2400/072** (2013.01); **F25B 2400/13** (2013.01); **F25B 2400/23** (2013.01); **F25B 2500/26** (2013.01)

Cited by
EP2846112A1; EP2863151A3; CN113316701A; EP3839376A1; CN104165478A; EP2966386A1; DE102013014543A1; WO2020132352A1; US11150001B2; US11604022B2; US11300328B2; US11874031B2; DE102013014542A1; US10317112B2; US10830503B2

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)
EP 2487437 A1 20120815; EP 2487437 B1 20150805

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