

Title (en)  
HEAT PUMP/AIR CONDITIONING APPARATUS WITH SEQUENTIAL OPERATION

Title (de)  
WÄRMEPUMPE/KLIMAANLAGE MIT SEQUENZIELLEM BETRIEB

Title (fr)  
APPAREIL DE POMPE À CHALEUR/CLIMATISEUR À FONCTIONNEMENT SÉQUENTIEL

Publication  
**EP 2368081 A4 20131009 (EN)**

Application  
**EP 09830629 A 20091202**

Priority  
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• NO 20085016 A 20081202

Abstract (en)  
[origin: WO2010064923A1] A system for providing a vapour compression cycle, comprises a compressor (1 ). A first heat exchanger (2) is arranged downstream of the compressor (1 ), and a first pressure reduction device (5) lies downstream of the first heat exchanger (2). A second heat exchanger (6) with a heat storage device (7) lies downstream of the first pressure reduction device (5), and a second pressure reduction device (3) is provided downstream of the second heat exchanger 6. A third heat exchanger (4) lies downstream of the second pressure reduction device (3) connected back to the compressor 1. A bypass line with a shutoff valve (8), bypasses the third heat exchanger (4), connected at a first end between the second heat exchanger (6) and the second pressure reduction device (3) and at a second end, between the third heat exchanger (4) and the compressor (1 ). At least one control unit controls at least the shutoff valve (8) and the second pressure reduction device (3) and the first pressure reduction device (5).

IPC 8 full level  
**F25B 30/00** (2006.01); **F25B 5/04** (2006.01); **F25B 6/04** (2006.01)

CPC (source: EP)  
**F24D 17/02** (2013.01); **F25B 5/04** (2013.01); **F25B 6/04** (2013.01); **F25B 30/02** (2013.01); **F25B 41/39** (2021.01); **F25B 9/008** (2013.01); **F25B 13/00** (2013.01); **F25B 2309/061** (2013.01); **F25B 2339/047** (2013.01); **F25B 2400/0409** (2013.01); **F25B 2600/2501** (2013.01); **F25B 2600/2513** (2013.01)

Citation (search report)  
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• [Y] WO 2008037896 A2 20080403 - HELIOTRANS [FR], et al  
• [A] JP 2003287294 A 20031010 - MATSUSHITA ELECTRIC IND CO LTD  
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Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**WO 2010064923 A1 20100610**; CA 2745109 A1 20100610; CA 2745109 C 20160726; CN 102239372 A 20111109; CN 102239372 B 20140326; EP 2368081 A1 20110928; EP 2368081 A4 20131009; EP 2368081 B1 20180718; JP 2012510605 A 20120510; JP 5860700 B2 20160216; NO 20085016 L 20100603; NO 331155 B1 20111024

DOCDB simple family (application)  
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