

Title (en)  
Heat pump device

Title (de)  
Wärmepumpenvorrichtung

Title (fr)  
Dispositif de pompes à chaleur

Publication  
**EP 1965154 B1 20111026 (DE)**

Application  
**EP 08003313 A 20080223**

Priority  
DE 102007010646 A 20070302

Abstract (en)  
[origin: EP1965154A2] An electronic expansion valve (80) is closed when a heating-pump device is inactive. It regulates overheating in an injected coolant when hot-gas temperatures are below a critical temperature. When hot-gas temperatures are in a range of a critical temperature, a partly liquid coolant is injected into a condenser (10) so that a defined maximum value is not reached in a hot-gas temperature. An independent claim is also included for a method for operating a heating-pump device.

IPC 8 full level  
**F25B 30/02** (2006.01)

CPC (source: EP)  
**F25B 30/02** (2013.01); **F25B 2400/13** (2013.01); **F25B 2600/21** (2013.01); **F25B 2600/2509** (2013.01)

Citation (examination)  
JP 02037259 A

Cited by  
EP2479517A1; CN113188269A; US9091464B2; DE102012101041A1; WO2013117187A2

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

DOCDB simple family (publication)  
**EP 1965154 A2 20080903; EP 1965154 A3 20090708; EP 1965154 B1 20111026**; AT E530864 T1 20111115; DE 102007010646 A1 20080904; DE 102007010646 B4 20220105; DE 202007019159 U1 20101028; EP 2345858 A2 20110720; EP 2345858 A3 20130515; ES 2374091 T3 20120213; PL 1965154 T3 20120330

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**EP 08003313 A 20080223**; AT 08003313 T 20080223; DE 102007010646 A 20070302; DE 202007019159 U 20070302; EP 10015257 A 20080223; ES 08003313 T 20080223; PL 08003313 T 20080223