

Title (en)
EXPANSION VALVE

Title (de)
EXPANSIONSVENTIL

Title (fr)
DÉTENDEUR

Publication
EP 2620724 A4 20140319 (EN)

Application
EP 11826895 A 20110922

Priority
• JP 2010213239 A 20100924
• JP 2011071574 W 20110922

Abstract (en)
[origin: EP2620724A1] An orifice (60) formed in a valve seat (12) has an orifice entrance (61) having the smallest diameter, an orifice middle section (62) which widens in diameter along the direction of refrigerant outflow from the orifice entrance (61) so as to form a first taper angle, and an orifice exit (63) which either widens in diameter or does not change in diameter along the direction of refrigerant outflow from the orifice middle section (62) so as to form a second taper angle smaller than the first taper angle.

IPC 8 full level
F16K 1/42 (2006.01); **F16K 47/02** (2006.01); **F25B 41/00** (2006.01); **F25B 41/06** (2006.01)

CPC (source: EP US)
F25B 41/31 (2021.01 - EP US); **F25B 2500/01** (2013.01 - EP US)

Citation (search report)
• [X] JP 2007292336 A 20071108 - SAGINOMIYA SEISAKUSHO INC
• [X] JP 2004340260 A 20041202 - SAGINOMIYA SEISAKUSHO INC
• [X] JP H0942510 A 19970214 - DAIKIN IND LTD
• [X] EP 2211077 A2 20100728 - FUJIKOKI CORP [JP]
• See references of WO 2012039450A1

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 2620724 A1 20130731; EP 2620724 A4 20140319; EP 2620724 B1 20190724; CN 103097836 A 20130508; CN 103097836 B 20150617; ES 2751362 T3 20200331; JP 2012067964 A 20120405; JP 5563940 B2 20140730; US 2013175351 A1 20130711; WO 2012039450 A1 20120329

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EP 11826895 A 20110922; CN 201180044279 A 20110922; ES 11826895 T 20110922; JP 2010213239 A 20100924; JP 2011071574 W 20110922; US 201113822184 A 20110922