

Title (en)
FREEZER

Title (de)
TIEFKÜHLSCHRANK

Title (fr)
CONGÉLATEUR

Publication
EP 3048386 A4 20170517 (EN)

Application
EP 14846460 A 20140912

Priority
• JP 2013194304 A 20130919
• JP 2014074210 W 20140912

Abstract (en)
[origin: EP3048386A1] A refrigeration system is equipped with a heat source-side unit (50), usage-side units (21, 22), and four-way switching valves (55, 56). A low-stage compressor (51a) and a high-stage compressor (51 c) are connected to each other in series via an intermediate pressure pipe (51b). The four-way switching valves (55, 56) switch between a first state and a second state. The first state is a state in which intermediate-pressure refrigerant discharged from the low-stage compressor (51a) and flowing in the intermediate pressure pipe (51b) flows to a heat source-side heat exchanger (53). The second state is a state in which the intermediate-pressure refrigerant flows to a usage-side heat exchanger (22a).

IPC 8 full level
F25B 7/00 (2006.01); **F25B 1/00** (2006.01); **F25B 1/10** (2006.01); **F25B 13/00** (2006.01)

CPC (source: EP)
F25B 1/10 (2013.01); **F25B 13/00** (2013.01); **F25B 2313/005** (2013.01); **F25B 2313/0231** (2013.01); **F25B 2313/0233** (2013.01);
F25B 2313/0234 (2013.01); **F25B 2313/02742** (2013.01)

Citation (search report)
• [XI] EP 2299207 A2 20110323 - SANYO ELECTRIC CO [JP]
• [XI] JP 2001349629 A 20011221 - DAIKIN IND LTD
• See references of WO 2015041166A1

Cited by
EP3985329A4

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 3048386 A1 20160727; EP 3048386 A4 20170517; CN 105556219 A 20160504; JP 2015059718 A 20150330; JP 5751299 B2 20150722;
WO 2015041166 A1 20150326

DOCDB simple family (application)
EP 14846460 A 20140912; CN 201480051053 A 20140912; JP 2013194304 A 20130919; JP 2014074210 W 20140912