

Title (en)
REFRIGERATION CYCLE EQUIPMENT

Title (de)
KÜHLZYKLUSAUSRÜSTUNG

Title (fr)
ÉQUIPEMENT DE CYCLE DE RÉFRIGÉRATION

Publication
EP 3073211 A1 20160928 (EN)

Application
EP 16161482 A 20160321

Priority
JP 2015062023 A 20150325

Abstract (en)
A refrigeration cycle equipment includes: a compressor (1); a four-way valve (2); an outdoor heat exchanger (3); an expansion valve (4); an indoor heat exchanger (5); a refrigerant pipe line which sequentially connects a compressor (1), a four-way valve (2), an outdoor heat exchanger (3), an expansion valve (4), and an indoor heat exchanger (5); a bypass pipe line (8) connecting a refrigerant pipe line between the outdoor heat exchanger (3) and the expansion valve (4) and a refrigerant pipe line between a suction port of the compressor (1) and the four-way valve (2); an open/close valve (9) provided for the bypass pipe line (8); an outdoor temperature sensor (17) provided for the outdoor heat exchanger (3) to detect an outdoor temperature; and a control unit (20) controlling the compressor (1), the four-way valve (2), the expansion valve (4), and the open/close valve mechanism (9). The control unit (20) controls the open/close valve mechanism (9) of the bypass pipe line (8) to be opened at a time when the outdoor temperature is detected to be more than a predetermined temperature in a defrosting operation of the refrigeration cycle equipment.

IPC 8 full level
F25B 13/00 (2006.01); **F25B 47/02** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)
F25B 13/00 (2013.01); **F25B 47/025** (2013.01); **F25B 49/02** (2013.01); **F25B 2400/0409** (2013.01); **F25B 2400/0411** (2013.01); **F25B 2500/31** (2013.01); **F25B 2700/2106** (2013.01)

Citation (applicant)
JP H09159329 A 19970620 - TOYOTOMI KOGYO CO LTD

Citation (search report)
• [AD] JP H09159329 A 19970620 - TOYOTOMI KOGYO CO LTD
• [A] EP 1647783 A2 20060419 - MITSUBISHI ELECTRIC CORP [JP]
• [A] EP 2428753 A2 20120314 - PANASONIC CORP [JP]

Cited by
CN111566420A; CN113124513A; CN109269017A; CN107702293A; CN108001164A; CN109210810A; US11397033B2

Designated contracting state (EPC)
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Designated extension state (EPC)
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EP 3073211 A1 20160928; **EP 3073211 B1 20200226**; **EP 3073211 B9 20200715**; JP 2016180564 A 20161013; JP 6465711 B2 20190206; PL 3073211 T3 20200713

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