

Title (en)

Air/water heat exchange apparatus

Title (de)

Luft-/Wasserwärmeaustauschervorrichtung

Title (fr)

Appareil d'échange thermique air/eau

Publication

EP 1959204 A1 20080820 (EN)

Application

EP 08000874 A 20080117

Priority

- JP 2007032568 A 20070213
- JP 2007032567 A 20070213

Abstract (en)

An object is to provide a cost saving and energy efficient air/water heat exchange apparatus by utilizing parts of an outdoor unit designed for a separate type air conditioner, and thus utilizing existing plant and equipment. The air/water heat exchange apparatus includes the outdoor unit that is separated by the separator into the fan room and the machine room. The fan room includes an air-refrigerant heat exchanger that exchanges heat between air and the refrigerant, and the fan that sends the air to the air-refrigerant heat exchanger. The machine room includes the compressor that compresses the refrigerant, the plate heat exchanger that exchanges heat between the refrigerant and water, the electronic expansion valves, and the accumulator that accumulates the refrigerant. The outdoor unit contains the closed refrigerant circuit, which includes the compressor, the plate heat exchanger, the electronic valves, the air-refrigerant heat exchanger, and the accumulator.

IPC 8 full level

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CPC (source: EP)

F24F 1/12 (2013.01); **F24F 1/16** (2013.01); **F24F 1/46** (2013.01); **F24F 1/54** (2013.01); **F24F 13/20** (2013.01)

Citation (applicant)

- JP 2001201107 A 20010727 - MATSUSHITA ELECTRIC IND CO LTD
- JP H08270984 A 19961018 - MITSUBISHI ELECTRIC CORP
- JP 2005083712 A 20050331 - CORONA CORP
- JP 2005147583 A 20050609 - MATSUSHITA ELECTRIC IND CO LTD

Citation (search report)

- [XY] JP 2001201107 A 20010727 - MATSUSHITA ELECTRIC IND CO LTD
- [XY] JP 2000274789 A 20001006 - MITSUBISHI ELECTRIC CORP
- [XY] JP 2005106303 A 20050421 - KIMURA KOHKI CO
- [XY] EP 1548377 A2 20050629 - SANYO ELECTRIC CO [JP]
- [Y] EP 1717522 A1 20061102 - SANYO ELECTRIC CO [JP]
- [Y] EP 1443282 A1 20040804 - TOSHIBA CARRIER CORP [JP]
- [DA] JP H08270984 A 19961018 - MITSUBISHI ELECTRIC CORP
- [DA] JP 2005147583 A 20050609 - MATSUSHITA ELECTRIC IND CO LTD

Cited by

EP3124890A1; CN101846370A; CN106642416A; CN102052720A; EP3260785A4

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Designated extension state (EPC)

AL BA MK RS

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