

Title (en)
HEAT EXCHANGER FOR OUTDOOR UNIT

Title (de)
WÄRMETAUSCHER FÜR AUSSENEINHEIT

Title (fr)
ÉCHANGEUR DE CHALEUR POUR UNITÉ EXTÉRIEURE

Publication
EP 1953480 B1 20120613 (EN)

Application
EP 06822260 A 20061025

Priority
• JP 2006321283 W 20061025
• JP 2005315996 A 20051031

Abstract (en)
[origin: EP1953480A1] To prevent, in a heat exchanger for an outdoor unit that has a structure where mutually independent plural refrigerant flow paths are arranged in multiple stages in a vertical direction and where one end side of these plural refrigerant flow paths is connected to a refrigerant flow distributor via capillary tubes, a situation where liquid refrigerant accumulates in the refrigerant flow path of the lowermost stage and the subcooling degree ends up becoming excessively large when the heat exchanger is caused to function as a condenser of refrigerant. An outdoor heat exchanger (26) includes plural refrigerant flow paths (26a to 26f) that are mutually independent and arranged in multiple stages in a vertical direction, capillary tubes (64a to 64f) that are respectively connected to one end side of the plural refrigerant flow paths (26a to 26f), and a refrigerant flow distributor (65) with which the capillary tubes (64a to 64f) merge. The lowermost stage capillary tube (64f) that is connected to the refrigerant flow path (26f) of the lowermost stage of the plural refrigerant flow paths (26a to 26f) includes a coil portion (70) having a coiled shape.

IPC 8 full level
F25B 39/04 (2006.01); **F24F 1/0067** (2019.01); **F24F 5/00** (2006.01); **F25B 41/00** (2006.01)

CPC (source: EP US)
F24F 1/0067 (2019.01 - EP US); **F24F 1/14** (2013.01 - EP); **F24F 1/46** (2013.01 - EP); **F25B 39/028** (2013.01 - EP US); **F28D 1/0477** (2013.01 - EP); **F28F 9/262** (2013.01 - EP); **F28F 27/02** (2013.01 - EP); **F25B 39/00** (2013.01 - EP); **F25B 41/37** (2021.01 - EP US); **F25B 2500/01** (2013.01 - EP)

Cited by
US2018094841A1; EP4290161A1; EP2801763A4; EP3009771A4; US10422566B2; US10488089B2; US10502468B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1953480 A1 20080806; **EP 1953480 A4 20110907**; **EP 1953480 B1 20120613**; ES 2386733 T3 20120828; JP 2007120899 A 20070517; JP 3985831 B2 20071003; WO 2007052515 A1 20070510

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EP 06822260 A 20061025; ES 06822260 T 20061025; JP 2005315996 A 20051031; JP 2006321283 W 20061025