

Title (en)

HEAT EXCHANGER AND MULTI-SPLIT SYSTEM HAVING SAME

Title (de)

WÄRMETAUSCHER UND MEHRFACH GETEILTES SYSTEM DAMIT

Title (fr)

ÉCHANGEUR DE CHALEUR ET SYSTÈME À MULTIPLES DIVISIONS COMPORTANT CELUI-CI

Publication

**EP 3279599 A4 20181107 (EN)**

Application

**EP 15887317 A 20151221**

Priority

- CN 201510149788 A 20150331
- CN 2015098131 W 20151221

Abstract (en)

[origin: EP3279599A1] Provided are a heat exchanger (100) and a multi-split system having the same. The heat exchanger (100) comprises a branch pipe (1) and a collecting pipe (2). The branch pipe (1) comprises a body (11), an inlet (12), and multiple flow separation holes. The inlet (12) is formed in the bottom of the body (11). The multiple flow separation holes are distributed in the side wall of the body (11) in the length direction of the body (11). In the direction from the bottom to the top, the body (11) comprises multiple segments of pipe bodies. In every two adjacent segments of pipe bodies, the flow area of a downstream pipe body is smaller than the flow area of an upstream pipe body, the height of each segment of pipe body is not greater than 0.5 meters, and the number N of the pipe bodies is greater than or equal to 2 and less than or equal to 3. The collecting pipe (2) and the branch pipe (1) are communicated by means of multiple heat exchange pipes, the multiple heat exchange pipes are distributed at intervals in the vertical direction, and the collecting pipe (2) has a refrigerant outlet (21).

IPC 8 full level

**F28F 9/00** (2006.01); **F25B 39/00** (2006.01); **F25B 39/02** (2006.01); **F25B 41/06** (2006.01); **F28F 9/02** (2006.01)

CPC (source: CN EP US)

**F24F 13/30** (2013.01 - CN); **F25B 39/00** (2013.01 - CN EP US); **F25B 39/028** (2013.01 - EP US); **F28D 7/0066** (2013.01 - US);  
**F28F 1/00** (2013.01 - US); **F28F 9/02** (2013.01 - US); **F28F 9/0263** (2013.01 - EP US); **F28F 9/0275** (2013.01 - EP US);  
**F28F 2009/029** (2013.01 - EP US)

Citation (search report)

- [I] DE 3310236 A1 19840927 - AUTOKUEHLER GES MBH [DE]
- [A] EP 0838641 A2 19980429 - SHOWA ALUMINUM CORP [JP]
- [A] US 2005006064 A1 20050113 - GARIMELLA SRINIVAS [US]
- See references of WO 2016155367A1

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 3279599 A1 20180207; EP 3279599 A4 20181107;** BR 112017002057 A2 20180130; CN 104764256 A 20150708;  
US 2018010857 A1 20180111; WO 2016155367 A1 20161006

DOCDB simple family (application)

**EP 15887317 A 20151221;** BR 112017002057 A 20151221; CN 2015098131 W 20151221; CN 201510149788 A 20150331;  
US 201515501957 A 20151221