Title (en)
   HEAT EXCHANGER

Title (de)
   WÄRMETAUSCHER

Title (fr)
   ÉCHANGEUR DE CHALEUR

Publication
   EP 2778595 A1 20140917 (EN)

Application
   EP 12851977 A 20121122

Priority
   • JP 2011255345 A 20111122
   • JP 2012103178 A 20120427
   • JP 2012007533 W 20121122

Abstract (en)
   A lower space (62) of a first header collecting pipe (60) of a heat exchanger (23) is, by partitions (80, 85, 90), divided into three communication chambers (62a-62c) and a single mixing chamber (63). The mixing chamber (63) communicates with the communication chamber (62a) through a through-hole (86) of a lower horizontal partition (85), communicates with the communication chamber (62b) through a through-hole (95) of a vertical partition (90), and communicates with the communication chamber (62c) through a through-hole (81) of an upper horizontal partition (80). Gas-liquid refrigerant flows into the mixing chamber (63), and is mixed in the mixing chamber (63). Then, the refrigerant is distributed to the communication chambers (62a-62c). Thus, the wetness of refrigerant flowing into a flat tube (32) is uniformized among the flat tubes (32), and performance of the heat exchanger (23) can be fully achieved.

IPC 8 full level
   F28F 9/22 (2006.01); **F25B 39/02** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP)
   F25B 39/00 (2013.01); **F28D 1/05391** (2013.01); **F28F 9/0278** (2013.01); F25B 39/028 (2013.01); F25B 2339/044 (2013.01)

Cited by
   EP3208560A4; EP3006886A4; EP3208559A4; US11946676B2; US10718554B2; US10907903B2; US9845994B2; US10345047B2; US10520256B2

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 2778595 A1 20140917; **EP 2778595 A4 20150729**; **EP 2778595 B1 20170104**; AU 2012341847 A1 20140717; AU 2012341847 B2 20141002; BR 112014011690 A2 20170509; CN 103946665 A 20140723; CN 103946665 B 20150909; ES 2618923 T3 20170622; IN 1223KON2014 A 20151016; JP 2013130386 A 20130704; JP 5376010 B2 20131225; KR 101432475 B1 20140820; KR 20140088622 A 20140710; WO 2013076993 A1 20130530

DOCDB simple family (application)
   EP 12851977 A 20121122; AU 2012341847 A 20121122; BR 112014011690 A 20121122; CN 201280056940 A 20121122; ES 12851977 T 20121122; IN 1223KON2014 A 20140606; JP 2012007533 W 20121122; JP 2012103178 A 20120427; KR 20147017060 A 20121122