

Title (en)
CONDENSER ASSEMBLY FOR REFRIGERANT

Title (de)
KONDENSATORBAUGRUPPE FÜR KÄLTEMITTEL

Title (fr)
ENSEMble CONDENSATEUR POUR FLUIDE FRIGORIGÈNE

Publication
EP 2972040 B1 20181031 (DE)

Application
EP 14709946 A 20140312

Priority

- DE 102013204294 A 20130312
- EP 2014054891 W 20140312

Abstract (en)
[origin: WO2014140133A1] The invention relates to a condenser assembly (1), comprising a plurality of heat-exchanger pipes (4), which are arranged equidistant from each other having corrugated fins (5) arranged therebetween and lead into deflection regions at both ends and have a free length (L_h) used for heat exchange and, in connection with the corrugated fins (5), form an end area (S) having a width corresponding to the free length (L_h) of the heat-exchanger pipes (4) and a height (L_v), such that the end area (S) results from the product of width and height, wherein the heat-exchanger pipes (4) are connected in parallel in groups and the individual groups are connected in series, wherein the heat-exchanger pipes (4) of the individual groups are arranged adjacent and each group comprises at least two heat-exchanger pipes (4). The percentage share (P) of the heat-exchanger pipes (4) of the first group results from $26.162 \ln(S/\text{dm}^2) - 40.746 \leq P \leq 25.49 \ln(S/\text{dm}^2) - 27.842$ for an end area (S) having a ratio of width to height in the range of 0.5 to 1.0, an end area (S) in the range of 10 to 30 dm², and a specification of the area of the end area (S) in dm².

IPC 8 full level
F28D 1/053 (2006.01); **F25B 39/04** (2006.01); **F28D 21/00** (2006.01)

CPC (source: EP US)
F25B 39/00 (2013.01 - US); **F25B 39/04** (2013.01 - EP US); **F28D 1/05375** (2013.01 - EP US); **F25B 40/02** (2013.01 - EP US);
F25B 2339/0441 (2013.01 - EP US); **F28D 2021/0084** (2013.01 - EP US)

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)
WO 2014140133 A1 20140918; BR 112015020809 A2 20170718; BR 112015020809 B1 20201222; CN 105143806 A 20151209;
CN 105143806 B 20180403; DE 102013204294 A1 20141002; EP 2972040 A1 20160120; EP 2972040 B1 20181031;
US 2016069597 A1 20160310

DOCDB simple family (application)
EP 2014054891 W 20140312; BR 112015020809 A 20140312; CN 201480015182 A 20140312; DE 102013204294 A 20130312;
EP 14709946 A 20140312; US 201514851299 A 20150911