

Title (en)

MULTI-CROSS SECTIONAL FLUID PATH CONDENSER

Title (de)

FLUIDWEGKONDENSATOR MIT MEHREREN QUERSCHNITTEN

Title (fr)

CONDENSEUR DE TRAJET DE FLUIDE À MULTIPLE SECTIONS TRANSVERSALES

Publication

**EP 3580505 A4 20201216 (EN)**

Application

**EP 18750626 A 20180213**

Priority

- US 201762458070 P 20170213
- US 2018018072 W 20180213

Abstract (en)

[origin: CN110382977A] A refrigerant condenser having multiple sections of straight tubes terminating in segmented headers, each subsequent section having an overall cross-sectional area less than an initial section with the overall cross section of the initial section large enough to substantially reduce vapor velocity thus reducing the refrigerant pressure drop; the total cross-sectional area dimensioned to cause entrance vapor velocity, to be sufficient to establish an internal film heat transfer coefficient greater than the external heat transfer coefficient while limiting the internal pressure drop for the heatrejection intended.

IPC 8 full level

**F25B 39/04** (2006.01); **F28B 7/00** (2006.01); **F28C 1/14** (2006.01); **F28D 1/04** (2006.01); **F28D 1/047** (2006.01); **F28D 1/053** (2006.01); **F28D 3/02** (2006.01); **F28D 3/04** (2006.01); **F28D 21/00** (2006.01); **F28F 1/32** (2006.01); **F28F 9/02** (2006.01); **F28F 25/00** (2006.01); **F28F 25/02** (2006.01)

CPC (source: EP)

**F25B 39/04** (2013.01); **F28C 1/14** (2013.01); **F28D 1/0417** (2013.01); **F28D 1/0477** (2013.01); **F28D 1/0478** (2013.01); **F28D 1/05333** (2013.01); **F28D 1/05366** (2013.01); **F28D 3/02** (2013.01); **F28D 3/04** (2013.01); **F28F 1/325** (2013.01); **F28F 25/02** (2013.01); **F25B 2339/041** (2013.01); **F28D 2021/007** (2013.01); **F28F 9/0243** (2013.01); **F28F 2009/029** (2013.01); **F28F 2025/005** (2013.01); **Y02B 30/70** (2013.01)

Citation (search report)

- [XYI] DE 102015105093 A1 20151015 - KEIHIN THERMAL TECHNOLOGY CORP [JP]
- [XYI] US 2011186277 A1 20110804 - HANAFUSA TATSUYA [JP]
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- [Y] EP 3002537 A1 20160406 - MITSUBISHI HEAVY IND LTD [JP]
- [A] EP 2616746 A2 20130724 - EVAPCO INC [US]
- See references of WO 2018148760A1

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)

CN 110382977 A 20191025; EP 3580505 A1 20191218; EP 3580505 A4 20201216

DOCDB simple family (application)

CN 201880014865 A 20180213; EP 18750626 A 20180213