

Title (en)

PARALLEL FLOW EVAPORATOR WITH VARIABLE CHANNEL INSERTION DEPTH

Title (de)

PARALLELFUSSVERDAMPFER MIT VARIABLE KANALEINSATZTIEFE

Title (fr)

EVAPORATEUR A EQUICOURANT AVEC PROFONDEUR VARIABLE D'INSERTION DE CANAL

Publication

**EP 1809958 B1 20180103 (EN)**

Application

**EP 05817473 A 20051104**

Priority

- US 2005040164 W 20051104
- US 98796004 A 20041112

Abstract (en)

[origin: US2006101849A1] In a parallel flow heat exchanger having an inlet manifold connected to a plurality of parallel channels, the degree of insertion depth of the parallel channels into the inlet manifold is variable so as to adjust the impedance to the refrigerant flow into the individual channels. The degree of insertion depth is progressively reduced toward a downstream end of the manifold for the individual channels or for the channel sections. The diameter of the inlet manifold is locally increased or its cross-section area altered in order to accommodate the flow of refrigerant around the tube insertions. Similar technique is applied to the outlet manifold as well to further balance hydraulic resistances.

IPC 8 full level

**F25B 39/02** (2006.01); **F25B 39/04** (2006.01); **F28B 1/00** (2006.01); **F28B 9/02** (2006.01)

CPC (source: EP US)

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Citation (examination)

JP H0331665 A 19910212 - MATSUSHITA ELECTRIC IND CO LTD, et al

Designated contracting state (EPC)

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DOCDB simple family (publication)

**US 2006101849 A1 20060518**; EP 1809958 A2 20070725; EP 1809958 A4 20101124; EP 1809958 B1 20180103; ES 2657624 T3 20180306; WO 2006055297 A2 20060526; WO 2006055297 A3 20061207

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