

Title (en)

Stacking-type, multi-flow, heat exchangers and methods for manufacturing such heat exchangers

Title (de)

Gestapelte mehrflutige Wärmetauscher und Verfahren zu deren Herstellung

Title (fr)

Echangeurs de chaleur à empilage à passages multiples et leur procédé de fabrication

Publication

**EP 1610080 A3 20061213 (EN)**

Application

**EP 05253669 A 20050614**

Priority

JP 2004183613 A 20040622

Abstract (en)

[origin: EP1610080A2] A stacking-type, multi-flow, heat exchanger (1) includes heat transfer tubes (2) and outer fins (3) stacked alternatively. Each heat transfer tube (2) is formed by connecting a pair of tube plates (30), and each heat transfer tube includes a raised portion (45,46) fixing the pair of tube plates (30) to each other. The raised portions (45,46) are formed by elongating or raising a portion of the pair of tube plates (30) substantially simultaneously at a position at which a pair of holes (41), each of which is formed through one tube plate (30) beforehand, are aligned. Complicated steps, such as inserting a raised portion into a hole, are not necessary. The number of types of tube plates (30) also may be reduced. Moreover, the efficiency of assembling a heat transfer tube when fixing a pair of tube plates to each other may be significantly increased.

IPC 8 full level

**F28D 1/03** (2006.01)

CPC (source: EP US)

**F28D 1/0333** (2013.01 - EP US); **F28D 2021/0085** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

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Designated extension state (EPC)

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