

Title (en)

Heat exchanger tube with inner offset fins with variable height

Title (de)

Innenberipptes Wärmeaustauschrohr mit versetzt angeordneten Rippen unterschiedlicher Höhe

Title (fr)

Tube d'échangeur de chaleur avec ailettes intérieures décalées et de hauteur variable

Publication

**EP 1182416 B1 20071003 (DE)**

Application

**EP 01119589 A 20010816**

Priority

DE 10041919 A 20000825

Abstract (en)

[origin: DE10041919C1] The head exchanger is divided into at least two zones (Z1-Z4). The fins (2, 3) at an angle of rise to the longitudinal axis of the tube are of two fin heights in any required combination and sequence. The adjacent zones bound on each other in such a way that the fin succession in the longitudinal direction of the tube has at least one offset fin.

IPC 8 full level

**F28F 1/40** (2006.01); **B21B 27/00** (2006.01); **B21C 37/20** (2006.01); **B21D 53/06** (2006.01); **B21B 1/22** (2006.01)

CPC (source: EP US)

**B21B 27/005** (2013.01 - EP US); **B21C 37/20** (2013.01 - EP US); **F28F 1/40** (2013.01 - EP US); **B21B 1/227** (2013.01 - EP US); **F28D 2021/0071** (2013.01 - EP US); **F28F 2215/04** (2013.01 - EP US)

Cited by

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DOCDB simple family (publication)

**DE 10041919 C1 20011031**; AT E374916 T1 20071015; CN 1243950 C 20060301; CN 1340689 A 20020320; DE 50113077 D1 20071115; EP 1182416 A2 20020227; EP 1182416 A3 20060104; EP 1182416 B1 20071003; JP 2002115987 A 20020419; US 2003006031 A1 20030109; US 2003111215 A1 20030619; US 6631758 B2 20031014; US 6722420 B2 20040420

DOCDB simple family (application)

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