

Title (en)  
Heat exchanger

Title (de)  
Wärmetauscher

Title (fr)  
Echangeur de chaleur

Publication  
**EP 0822381 A3 19980819 (EN)**

Application  
**EP 97305236 A 19970715**

Priority  
JP 21798396 A 19960731

Abstract (en)  
[origin: EP0822381A2] A heat exchanger (10) comprises at least one conduit (16,17) which has a plurality of slots (16C,17C) therein. A plurality of tube units (12,22) each has at least one open end (12A,22A) thereof. The open end (12A,22A) of each the tube units (12,22) is fixedly and hermetically coupled to the slots (16C,17C) of at least one conduit (16,17). The tube units (12,22) in fluid communication with the interior of the conduit (16,17) through the open end (12A,22A) of each tube unit (12,22). A limiting mechanism (126,226) is provided adjacent to the open end (12A,22A) of the tube units (12,22) for limiting the conduit (16,17) to have a predetermined position without inclining related to the tube units (12,22). Thereby, the heat exchanger (10) could be temporally assembled without any relative sliding motion between the plurality of tubes and tanks while simultaneously non-decreasing the efficiency of manufacturing costs of the heat exchanger.

IPC 1-7

**F28D 1/03**

IPC 8 full level  
**F28F 9/02** (2006.01); **F28D 1/03** (2006.01); **F28F 9/18** (2006.01)

CPC (source: EP)  
**F28D 1/035** (2013.01); **F28F 9/18** (2013.01)

Citation (search report)

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Designated contracting state (EPC)  
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

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**EP 0822381 A2 19980204; EP 0822381 A3 19980819; JP H1047887 A 19980220**

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