

Title (en)

Plate type heat-exchanger.

Title (de)

Plattenwärmetauscher.

Title (fr)

Echangeur de chaleur à plaques.

Publication

**EP 0548602 B1 19951018 (DE)**

Application

**EP 92120516 A 19921202**

Priority

DE 4142177 A 19911220

Abstract (en)

[origin: EP0548602A1] The invention relates to a plate-type heat exchanger having counterflow or parallel-flow ducts which are formed, on the one hand, by individual plates (1) connected to form plate pairs (P) and, on the other hand, by plate pairs (P) joined to form a plate stack (S). In order to distribute the media entering through the feed cross-sections (Z1 and Z2) over the entire width of the duct within a short axial entry region (E), the individual plates (1) are provided with projections (2) which resemble guide blades and project into the respective flow duct at least from one side. In order to improve the heat transfer capacity, the individual plates (1) can be provided with profiles, which adjoin the entry region (E), extend over the entire duct width and duct length and are preferably made from a multiplicity of individual knobs (31, 32), in order to generate turbulence in the ducts. <IMAGE>

IPC 1-7

**F28F 3/08; F28D 9/00**

IPC 8 full level

**F28D 9/00** (2006.01); **F28F 3/04** (2006.01); **F28F 3/08** (2006.01); **F28F 3/10** (2006.01)

CPC (source: EP US)

**F28D 9/0037** (2013.01 - EP US); **F28F 3/044** (2013.01 - EP US); **F28F 3/083** (2013.01 - EP US); **F28F 9/0268** (2013.01 - EP US);  
**F28F 2250/104** (2013.01 - EP US)

Cited by

EP1070928A4; EP0803694A3; DE19832164A1; DE19832164C2; FR3096768A1; WO2018166648A1; WO2020239767A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)

**EP 0548602 A1 19930630; EP 0548602 B1 19951018**; AT E129337 T1 19951115; DE 4142177 A1 19930624; DE 4142177 C2 19940428;  
DE 59204069 D1 19951123; DK 0548602 T3 19960219; ES 2079775 T3 19960116; RU 2068166 C1 19961020; US 5301747 A 19940412

DOCDB simple family (application)

**EP 92120516 A 19921202**; AT 92120516 T 19921202; DE 4142177 A 19911220; DE 59204069 T 19921202; DK 92120516 T 19921202;  
ES 92120516 T 19921202; RU 92016228 A 19921218; US 99270592 A 19921218