Title (en)

PLATE HEAT EXCHANGER, METHOD FOR ITS PRODUCTION, AND ITS USE

Title (de)

PLATTENWÄRMETAUSCHER, VERFAHREN ZU DESSEN HERSTELLUNG UND DESSEN VERWENDUNG

Title (fr)

ECHANGEUR DE CHALEUR À PLAQUES, PROCÉDÉ DE FABRICATION DE CELUI-CI ET UTILISATION DE CELUI-CI

Publication

EP 1996889 A1 20081203 (DE)

Application

EP 07723516 A 20070322

Priority

- EP 2007002565 W 20070322
- DE 102006013503 A 20060323

Abstract (en)

[origin: WO2007110196A1] The invention relates to a plate heat exchanger composed of a plurality of plates (1), preferably made from sintered ceramic material, in which fluid flow guiding ducts (2) as a duct system are formed such that a substantially meandering profile of the fluid flow is generated over the surface of the respective plate, wherein the side walls (3) of the guiding ducts (2) have a plurality of apertures (4) which lead to turbulence of the fluid flow. The invention also relates to a method for producing a plate heat exchanger of said type, in particular by means of a diffusion welding process in which the plates are joined to form a seam-free monolithic block. The plate heat exchangers according to the invention are suitable in particular for applications at high temperatures and/or with corrosive media and also as reactors.

IPC 8 full level

F28D 9/00 (2006.01); **F28F 3/04** (2006.01); **F28F 21/04** (2006.01)

CPC (source: EP US)

F28D 9/005 (2013.01 - EP US); **F28F 3/048** (2013.01 - EP US); **F28F 13/12** (2013.01 - EP US); **F28F 21/04** (2013.01 - EP US); F28F 2250/04 (2013.01 - EP US); F28F 2250/102 (2013.01 - EP US)

Citation (search report)

See references of WO 2007110196A1

Cited by

US11448468B2; WO2024068738A3; DE102020203223A1; WO2021180680A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2007110196 A1 20071004; AT E535769 T1 20111215; CA 2643757 A1 20071004; CA 2643757 C 20110927; CN 101405554 A 20090408; CN 101405554 B 20110511; DE 102006013503 A1 20080124; EP 1996889 A1 20081203; EP 1996889 B1 20111130; ES 2373992 T3 20120210; JP 2009530582 A 20090827; US 2009151917 A1 20090618; US 8967238 B2 20150303

DOCDB simple family (application)

EP 2007002565 W 20070322; AT 07723516 T 20070322; CA 2643757 A 20070322; CN 200780010372 A 20070322; DE 102006013503 A 20060323; EP 07723516 A 20070322; ES 07723516 T 20070322; JP 2009500779 A 20070322; US 22542507 A 20070322