

Title (en)
PLATE HEAT EXCHANGER

Title (de)
PLATTENWÄRMETAUSCHER

Title (fr)
ECHANGEUR DE CHALEUR A PLAQUES

Publication
EP 1038147 A1 20000927 (EN)

Application
EP 98958933 A 19981207

Priority
• FI 9800952 W 19981207
• FI 974476 A 19971210

Abstract (en)
[origin: WO9930099A1] The invention relates to a plate heat exchanger (1) which consists of a plate stack (12) composed of advantageously circular grooved plates (2, 3) welded together. The clearances between the plates (2, 3) form flow ducts (16, 17) for flows of a heat-supplying medium and a heat-receiving medium. The plates (2, 3) are provided with holes (6, 8, 9) which form inlet and outlet channels (13, 14, 15) for the flows (20, 39) of the heat transfer media. At least one of the holes (6) on the plates (2, 3) is located substantially in the centre of the plate (2, 3). The plate heat exchanger (1) operates on the cross flow principle. When the plate heat exchanger (1) is provided with a partly opened mantle which connects the end plates (31, 32) together, and the central channel (13) is provided with a partly opened pipe to control the flows, the plate heat exchanger (1) is made to function both on the counter flow principle and the forward flow principle.

IPC 1-7
F28D 9/00; **F28F 3/10**

IPC 8 full level
F28D 9/00 (2006.01); **F28D 1/03** (2006.01); **F28F 3/04** (2006.01); **F28F 3/10** (2006.01); **F28F 9/26** (2006.01)

CPC (source: EP)
F28D 1/0333 (2013.01); **F28D 9/0012** (2013.01); **F28F 3/046** (2013.01)

Citation (search report)
See references of WO 9930099A1

Cited by
US10156401B2

Designated contracting state (EPC)
CH DE DK ES FI FR GB IE IT LI NL SE

DOCDB simple family (publication)
WO 9930099 A1 19990617; AU 1489599 A 19990628; DE 69837557 D1 20070524; DE 69837557 T2 20080103; DK 1038147 T3 20070716; EP 1038147 A1 20000927; EP 1038147 B1 20070411; ES 2285790 T3 20071116; FI 109148 B 20020531; FI 974476 A0 19971210; FI 974476 A 19990611

DOCDB simple family (application)
FI 9800952 W 19981207; AU 1489599 A 19981207; DE 69837557 T 19981207; DK 98958933 T 19981207; EP 98958933 A 19981207; ES 98958933 T 19981207; FI 974476 A 19971210