

Title (en)  
A plate heat exchanger

Title (de)  
Plattenwärmetauscher

Title (fr)  
Echangeur de chaleur à plaques

Publication  
**EP 1630510 A1 20060301 (EN)**

Application  
**EP 04020494 A 20040828**

Priority  
EP 04020494 A 20040828

Abstract (en)

A plate heat exchanger comprising separate flow paths for two flows of fluid said paths having different pressure drops at equal mass flows may according to the invention be designed economically by stacking pairs of two plates (4, 5) provided with pressed patterns, at least one of the plates (4) in a pair (4, 5) being provided with at least two different press depths (D 1 , D 2 ), the smaller (D 2 ) being at least 40% of the greater (D 1 ).

IPC 8 full level

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

CPC (source: EP KR US)

**F28D 9/00** (2013.01 - KR); **F28D 9/005** (2013.01 - EP US); **F28F 3/04** (2013.01 - EP KR US)

Citation (applicant)

- JP H11173771 A 19990702 - DAIKIN IND LTD
- JP H11281283 A 19991015 - HISAKA WORKS LTD

Citation (search report)

- [X] AT 393162 B 19910826 - BROECKL GERHARD ING [AT], et al
- [DX] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 12 29 October 1999 (1999-10-29)
- [A] PATENT ABSTRACTS OF JAPAN vol. 2002, no. 08 5 August 2002 (2002-08-05)

Cited by

EP2233873A1; CN114945789A; CN114981607A; US2011108258A1; US9618280B2; CN114945788A; SE545607C2; DE102022118344A1; DE202009017100U1; EP3306253A1; US12044486B2; WO2021154153A1; WO2011138467A1; WO2021154154A1; WO2021154151A1; EP3351886A1; WO2018133954A1; US10989482B2; EP2267391B1

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DOCDB simple family (publication)

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