

Title (en)
A plate heat exchanger

Title (de)
Plattenwärmetauscher

Title (fr)
Echangeur de chaleur à plaques

Publication
EP 1630510 B2 20140305 (EN)

Application
EP 04020494 A 20040828

Priority
EP 04020494 A 20040828

Abstract (en)
[origin: EP1630510A1] 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 (D₁, D₂), the smaller (D₂) being at least 40% of the greater (D₁).

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 (opposition)

Opponent :

- IT VR20010049 U1 20030305 - BENETTON BRUNO [IT]
- WO 8301998 A1 19830609 - ALFA LAVAL AB [SE]
- FR 2821926 A1 20020913 - CIAT SA [FR]
- US 6237679 B1 20010529 - VESTERGREN ULF [SE]

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

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1630510 A1 20060301; EP 1630510 B1 20070103; EP 1630510 B2 20140305; AT E350639 T1 20070115; AU 2005279446 A1 20060309; AU 2005279446 B2 20100218; AU 2005279446 C1 20140612; CN 100513968 C 20090715; CN 101069058 A 20071107; CY 1106418 T1 20111012; DE 602004004114 D1 20070215; DE 602004004114 T2 20070712; DE 602004004114 T3 20140724; DK 1630510 T3 20070423; ES 2279267 T3 20070816; ES 2279267 T5 20140611; JP 2008511811 A 20080417; KR 20070048707 A 20070509; MY 136232 A 20080829; PL 1630510 T3 20070531; PL 1630510 T5 20140731; PT 1630510 E 20070430; SI 1630510 T1 20070630; TW 200607971 A 20060301; TW I320089 B 20100201; US 2008029257 A1 20080207; WO 2006024340 A1 20060309

DOCDB simple family (application)

EP 04020494 A 20040828; AT 04020494 T 20040828; AU 2005279446 A 20050707; CN 200580028871 A 20050707; CY 071100426 T 20070327; DE 602004004114 T 20040828; DK 04020494 T 20040828; EP 2005007329 W 20050707; ES 04020494 T 20040828; JP 2007528635 A 20050707; KR 20077002454 A 20070131; MY PI20053424 A 20050726; PL 04020494 T 20040828; PT 04020494 T 20040828; SI 200430190 T 20040828; TW 94123481 A 20050712; US 63258205 A 20050707