

Title (en)
Heat exchange unit

Title (de)
Wärmetauscher

Title (fr)
Echangeur de chaleur

Publication
EP 1739379 A2 20070103 (EN)

Application
EP 06013348 A 20060628

Priority
JP 2005190168 A 20050629

Abstract (en)
A heat exchange unit (1) includes first and second plates (10,20), which is identical to each other in configuration in a peripheral area (50) thereof, but different from each other in a central irregularity pattern section (30,40). The irregularity pattern section (30,40) has a projection-recess pattern on its surface and a recess-projection pattern corresponding thereto on another surface. These patterns are different from each other in configuration. The projection-recess pattern of the first plate (10) has a reverse relationship in projections and recesses to the projection-recess pattern of the second plate (20) so as to be symmetrical to each other. The first and second plates (10,20) are placed alternately one upon another so that the peripheral areas (50) of the first and second plates (10,20) are directed to a same direction and projections of the irregularity pattern section (30) of the first plate (10) come, on peaks thereof, into contact with projections of the irregularity pattern section (40) of the second plate (20).

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

CPC (source: EP KR US)
F28D 3/00 (2013.01 - KR); **F28D 9/00** (2013.01 - KR); **F28D 9/0043** (2013.01 - EP US); **F28F 3/04** (2013.01 - EP US); **F28F 13/08** (2013.01 - KR); **F28F 2250/104** (2013.01 - EP US)

Cited by
EP2674718A3; DE102012105144B4

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 NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1739379 A2 20070103; CN 1892163 A 20070110; JP 2007010202 A 20070118; KR 20070001819 A 20070104; TW 200712419 A 20070401; US 2007000654 A1 20070104

DOCDB simple family (application)
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