

Title (en)

Plate Heat exchanger for high exposure from thermal cycling

Title (de)

Stapelscheiben-Wärmeübertrager für hohe Temperaturwechselbeanspruchung

Title (fr)

Echangeur de chaleur à plaque, résistant aux contraintes alternées de cyclage thermique

Publication

EP 2236969 A3 20140402 (DE)

Application

EP 10155227 A 20100302

Priority

DE 102009012784 A 20090313

Abstract (en)

[origin: EP2236969A2] The exchanger has two fluid channels conveying two different fluids and placed between multiple disks (2) that are stacked one above the other. An end plate (5) is placed at ends of the disks, and two inlet openings are provided for supplying two different fluids, respectively. Two outlet openings are provided for discharging the fluids, respectively, and the end plate is provided with an expansion region. The expansion region is designed as a recess (23), a slot or a reinforcing fin. An independent claim is also included for an internal combustion engine comprising a compressor.

IPC 8 full level

F28D 9/00 (2006.01)

CPC (source: EP US)

F28D 9/005 (2013.01 - EP US); **F28F 2265/26** (2013.01 - EP US)

Citation (search report)

- [XP] WO 2009062739 A1 20090522 - SWEP INT AB [SE], et al
- [X] JP S58221391 A 19831223 - MATSUSHITA ELECTRIC IND CO LTD
- [Y] US 2005155749 A1 20050721 - MEMORY STEPHEN B [US], et al
- [Y] US 2004182547 A1 20040923 - BIRKERT ARNDT [DE], et al
- [A] DE 102007021726 A1 20071115 - MODINE MFG CO [US]
- [A] EP 1512930 A2 20050309 - CALSONIC KANSEI CORP [JP]

Cited by

GB2593472A; GB2593472B; WO2021191590A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA ME RS

DOCDB simple family (publication)

EP 2236969 A2 20101006; EP 2236969 A3 20140402; EP 2236969 B1 20170510; DE 102009012784 A1 20100916; US 2010258095 A1 20101014; US 9243849 B2 20160126

DOCDB simple family (application)

EP 10155227 A 20100302; DE 102009012784 A 20090313; US 65958610 A 20100315