

Title (en)

Stacked plate cooler, use of same and combustion engine with a stacked plate cooler

Title (de)

Stapelscheiben-Kühler, Verwendung des Stapelscheiben-Kühlers und Brennkraftmaschine mit einem Stapelscheiben-Kühler

Title (fr)

Refroidisseur à empilement de plaques, utilisation du refroidisseur à empilement de plaques et moteur à combustion interne doté d'un refroidisseur à empilement de plaques

Publication

EP 2295916 A3 20141231 (DE)

Application

EP 10170781 A 20100726

Priority

DE 102009035239 A 20090729

Abstract (en)

[origin: EP2295916A2] The stacked disk-radiator (10) has multiple tub-shaped plates (12) directly fastened on a base plate (20), where the base plate has a recess (24) in the base plate main level (23). A lowest plate is inserted in the recess and is added by an adding connection.

IPC 8 full level

F28D 9/00 (2006.01); **F16N 39/02** (2006.01); **F28F 3/02** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP)

F01M 5/002 (2013.01); **F28D 9/005** (2013.01); **F28F 3/02** (2013.01); **F28F 9/0246** (2013.01); **F28D 2021/0089** (2013.01); **F28F 9/002** (2013.01); **F28F 2225/00** (2013.01); **F28F 2275/025** (2013.01); **F28F 2275/04** (2013.01)

Citation (search report)

- [X] DE 102007030563 A1 20090102 - MODINE MFG CO [US]
- [A] JP 2008045477 A 20080228 - MAHLE FILTER SYSTEMS JP CORP
- [A] DE 102004003790 A1 20050811 - BEHR GMBH & CO KG [DE]
- [E] DE 102010001828 A1 20110811 - BEHR GMBH & CO KG [DE]

Cited by

DE102014008426A1; CN106461354A; RU2485428C1; FR3079266A1; US11150027B2; WO2015150321A3; WO2019180378A1

Designated contracting state (EPC)

AL 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)

BA ME RS

DOCDB simple family (publication)

EP 2295916 A2 20110316; **EP 2295916 A3 20141231**; **EP 2295916 B1 20170920**; DE 102009035239 A1 20110414

DOCDB simple family (application)

EP 10170781 A 20100726; DE 102009035239 A 20090729