

Title (en)

Heat exchanger, in particular for an automobile, and corresponding assembly methods

Title (de)

Wärmetauscher, insbesondere für Kraftfahrzeug, und entsprechende Montageverfahren

Title (fr)

Échangeur de chaleur, notamment pour véhicule automobile, et procédés d'assemblage correspondants

Publication

**EP 2450657 A1 20120509 (FR)**

Application

**EP 11188042 A 20111107**

Priority

FR 1059209 A 20101108

Abstract (en)

The exchanger (1) has a heat exchange core (3) provided for exchanging heat between fluids, and distributing boxes (7, 9) for distributing one of the fluids. A sealing unit e.g. sealing ring, assures the sealing between the heat exchange core and the distributing box, and is formed by an adhesive. The core is arranged to form a receiving slot (35) for receiving the sealing unit. The sealing unit is supported by two external walls of the core, so that the core makes a carrying structure for carrying the exchanger. The external walls are formed by a receiving case (5) surrounding the core. An independent claim is also included for a method for exchanging a heat exchanger.

Abstract (fr)

L'invention concerne un échangeur de chaleur entre au moins un premier fluide et un second fluide, notamment pour véhicule automobile, comprenant un faisceau d'échange (3) de chaleur entre lesdits fluides, au moins un boîtier de distribution (7,9) pour le premier fluide, et un moyen d'étanchéité entre ledit faisceau (3) et ledit au moins un boîtier de distribution (7,9). Selon l'invention, ledit moyen d'étanchéité est supporté par au moins deux parois externes (5) dudit faisceau (3) de sorte que ledit faisceau (3) devient une structure portante dudit échangeur.

IPC 8 full level

**F28D 9/00** (2006.01); **F28F 9/00** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP)

**F28D 9/0043** (2013.01); **F28F 9/001** (2013.01); **F28F 9/0219** (2013.01); **F28D 2021/0082** (2013.01); **F28F 2230/00** (2013.01);  
**F28F 2275/025** (2013.01)

Citation (search report)

- [X] EP 1707911 A1 20061004 - MODINE MFG CO [US]
- [XAY] US 2010031507 A1 20100211 - SHAH SURESH DEEPCHAND [US], et al
- [XP] WO 2011073038 A1 20110623 - VALEO SYSTEMES THERMIQUES [FR], et al
- [XA] DE 102008018594 A1 20081016 - BEHR GMBH & CO KG [DE]
- [XA] WO 2010003807 A1 20100114 - VALEO SYSTEMES THERMIQUES [FR], et al
- [XPYI] WO 2011023516 A1 20110303 - BEHR GMBH & CO KG [DE], et al
- [X] DE 19639422 A1 19970904 - MAN B & W DIESEL GMBH [DK], et al
- [I] EP 2014892 A1 20090114 - JOAO DE DEUS & FILHOS S A [PT]
- [A] DE 19902504 A1 20000810 - BEHR GMBH & CO [DE]

Citation (examination)

- US 2010096101 A1 20100422 - BRAUN JASON J [US], et al
- DE 102009012024 A1 20100916 - BEHR GMBH & CO KG [DE]

Cited by

CN111692899A; FR2996298A1; JPWO2021176595A1; DE202011051713U1; JP2018529924A; EP3671097A1; US10323886B2; US10619946B2;  
WO2021176595A1; WO2014048962A1; WO2020127721A1; EP2901095B1; EP2901095B2

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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2450657 A1 20120509**; FR 2967245 A1 20120511; FR 2967245 B1 20141128

DOCDB simple family (application)

**EP 11188042 A 20111107**; FR 1059209 A 20101108