

Title (en)
Heat exchanger with a holding element

Title (de)
Wärmeübertrager mit Halterungselement

Title (fr)
Échangeur de chaleur doté d'un élément de support

Publication
EP 2717009 A3 20140827 (DE)

Application
EP 13187181 A 20131002

Priority
DE 102012218089 A 20121004

Abstract (en)
[origin: EP2717009A2] The exchanger has a retention element (1) retaining the exchanger and including a receiving region (2) and a spacing element (4). The receiving region partially receives the exchanger and includes a contour that corresponds to an outer contour of the exchanger, where the receiving region includes a fixing unit by which the retention element is fixed to the exchanger. The spacing element outwardly protrudes from the retention element and protrudes beyond the outer contour of the exchanger. A stopping element (3) determines a maximum insertion depth (t) of the exchanger. An independent claim is also included for an air conditioning system.

IPC 8 full level
F28F 9/007 (2006.01); **F28F 9/00** (2006.01)

CPC (source: EP US)
F28F 9/002 (2013.01 - EP US); **F28F 9/007** (2013.01 - EP US); **F28F 2280/00** (2013.01 - EP US)

Citation (search report)

- [XI] EP 2189746 A1 20100526 - BEHR GMBH & CO KG [DE], et al
- [X] US 2003051497 A1 20030320 - NOMURA TOSHIAKI [JP], et al
- [X] GB 2373571 A 20020925 - VISTEON GLOBAL TECH INC [US]
- [X] US 5570737 A 19961105 - TOKUTAKE TOSHINORI [JP]
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- [X] US 2004089769 A1 20040513 - CARRIER PASCAL [FR], et al
- [X] WO 2005100058 A1 20051027 - BEHR GMBH & CO KG [DE], et al
- [X] DE 19857494 A1 19990701 - VALEO THERMIQUE MOTEUR SA [FR]
- [X] WO 2010011452 A2 20100128 - CARRIER CORP [US], et al
- [X] EP 0440400 A1 19910807 - SHOWA ALUMINIUM CO LTD [JP]

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 2717009 A2 20140409; EP 2717009 A3 20140827; CN 203628986 U 20140604; DE 102012218089 A1 20140410;
US 2014096932 A1 20140410; US 9593892 B2 20170314

DOCDB simple family (application)

EP 13187181 A 20131002; CN 201320570544 U 20130913; DE 102012218089 A 20121004; US 201314044923 A 20131003