

Title (en)
Heat exchanger

Title (de)
Wärmeübertrager

Title (fr)
Caloporteur

Publication
EP 2293648 B1 20170719 (DE)

Application
EP 09290663 A 20090902

Priority
EP 09290663 A 20090902

Abstract (en)
[origin: EP2293648A1] The heat exchanger (10) has a heating register (1) arranged in a frame (11) and provided with two contact plates (6, 6'). An insulation profile (16) is provided on the heating register in a potential-free arrangement, and is made of silicone. Rib elements contact heat conductive plates at the heating register. A covering element covers the contact plates and power supply elements e.g. cable and conductor rails, and is made of plastic. A seal e.g. rubber profile or foam profile, is provided between the covering element and the heat exchanger.

IPC 8 full level
H05B 3/50 (2006.01); **F24H 3/04** (2006.01)

CPC (source: EP)
F24H 3/0405 (2013.01); **F24H 3/0429** (2013.01); **F24H 9/1863** (2013.01); **F24H 9/1872** (2013.01); **H05B 3/50** (2013.01)

Citation (examination)
EP 1768457 A1 20070328 - CATEM GMBH & CO KG [DE]

Citation (opposition)

Opponent : Eberspächer catem GmbH & Co. KG

- US 2008173637 A1 20080724 - TAGUCHI KOSHIRO [JP]
- EP 1318694 A1 20030611 - CATEM GMBH & CO KG [DE]
- US 2005205552 A1 20050922 - HAN INCHEOL [KR], et al
- JP 2007118779 A 20070517 - CALSONIC KANSEI CORP
- DE 19811629 A1 19980924 - DENSO CORP [JP]
- DE 10012320 A1 20000921 - DENSO CORP [JP]
- WO 9918756 A1 19990415 - BODY HEAT LTD [IL], et al
- EP 1657963 A1 20060517 - DBK DAVID & BAADER GMBH [DE]
- EP 1768457 A1 20070328 - CATEM GMBH & CO KG [DE]
- DE 19902050 A1 19990909 - MC MICRO COMPACT CAR AG [CH]
- DE 2948591 A1 19810611 - EICHENAUER FA FRITZ [DE]
- DE 4040258 A1 19920702 - BRAUN AG [DE]

Cited by
EP3064856A1; US10363797B2; EP2933577B1

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

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