

Title (en)  
Exhaust gas heat exchanger

Title (de)  
Abgaswärmeübertrager

Title (fr)  
Échangeur thermique pour gaz d'échappement

Publication  
**EP 2559962 A3 20140409 (DE)**

Application  
**EP 12180174 A 20120810**

Priority  
DE 102011081031 A 20110816

Abstract (en)  
[origin: EP2559962A2] The heat exchanger (1) comprises a tube bundle with exhaust pipes (15) and coolant housing (2) which encloses the tube bundle and refrigerant inlet (3) and coolant outlet (4). A three-dimensional coolant guide device (5) is formed between tube bundle and housing for adjusting coolant channel (6,7), such that the refrigerant inlet is opened into the coolant channel.

IPC 8 full level  
**F28D 7/16** (2006.01); **F01N 5/02** (2006.01); **F02M 25/07** (2006.01); **F28F 9/00** (2006.01); **F28F 9/02** (2006.01); **F28F 9/22** (2006.01)

CPC (source: EP)  
**F02M 26/28** (2016.02); **F28D 7/1684** (2013.01); **F28F 9/005** (2013.01); **F28F 9/026** (2013.01); **F28F 9/22** (2013.01); **F01N 2240/02** (2013.01)

Citation (search report)  
• [XYI] DE 29622411 U1 19970213 - BEHR GMBH & CO [DE]  
• [XI] JP 2008297993 A 20081211 - KOMATSU MFG CO LTD  
• [X] WO 2011061090 A2 20110526 - VALEO TERMICO SA [ES], et al  
• [Y] US 2007235173 A1 20071011 - CHEN WEI [US]  
• [A] DE 102008025862 A1 20090122 - DAIMLER AG [DE]  
• [X] WO 2009108238 A2 20090903 - MODINE MFG CO [US], et al  
• [A] GB 2027864 A 19800227 - AMERICAN PRECISION IND  
• [X] US 2008073059 A1 20080327 - WEEL KEES [AU]  
• [A] US 2009013678 A1 20090115 - CAPELLE ANDREAS [DE], et al

Cited by  
DE102014202447A1; DE102017218254A1; WO2019072853A1; US2017045308A1; US11029100B2; US2018335263A1; DE102017208324A1; CN111148961A; US11655745B2; US11002490B2; WO2016091806A1; US10883773B2

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 2559962 A2 20130220; EP 2559962 A3 20140409; EP 2559962 B1 20181003**; DE 102011081031 A1 20130221

DOCDB simple family (application)  
**EP 12180174 A 20120810**; DE 102011081031 A 20110816