

Title (en)
HEAT EXCHANGER FOR A COMBUSTION ENGINE

Title (de)
WÄRMETAUSCHER FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)
ÉCHANGEUR DE CHALEUR POUR MOTEUR À COMBUSTION INTERNE

Publication
EP 1977185 B1 20171213 (DE)

Application
EP 06828871 A 20061026

Priority

- EP 2006010343 W 20061026
- DE 102005055481 A 20051118

Abstract (en)
[origin: WO2007057099A1] Disclosed is a heat exchanger for a combustion engine, comprising a first connection zone (1, 102) for delivering a fluid that is to be cooled, at least some of said fluid being composed of exhaust gas of the combustion engine, a second connection zone (3, 103) for discharging the fluid, and an exchanger zone (2, 101, 104, 105) which is arranged between the first and the second connection zone relative to a flow path of the fluid. A coolant can flow around the exchanger zone (2, 101, 104, 105) while at least part of the heat exchanger is made of ferritic steel.

IPC 8 full level
F28F 21/08 (2006.01); **F02M 26/25** (2016.01); **F02M 26/32** (2016.01)

CPC (source: EP US)
F02M 26/25 (2016.02 - EP US); **F02M 26/32** (2016.02 - EP US); **F28D 9/0043** (2013.01 - EP US); **F28F 21/083** (2013.01 - EP US); **F02M 26/05** (2016.02 - EP US); **F02M 26/06** (2016.02 - EP US); **F02M 26/11** (2016.02 - EP US); **F28F 9/001** (2013.01 - EP US); **F28F 2250/104** (2013.01 - EP US)

Citation (examination)

- US 4461811 A 19840724 - BORNEMAN PAUL R [US], et al
- US 2005022450 A1 20050203 - TAN CHER-DIP [US], et al
- US 2763923 A 19560925 - BASIL WEBB THOMAS
- JP H08271183 A 19961018 - BABCOCK HITACHI KK
- DE 10328846 A1 20040219 - DENSO CORP [JP], et al
- DE 1093391 B 19601124 - KOHLENSCHIEDUNGS GMBH
- DE 1773283 U 19580828 - SEIFFERT ROHRLEITUNGSBAU G M B [DE]

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
DE 102005055481 A1 20070524; CN 101313192 A 20081126; CN 101313192 B 20100901; EP 1977185 A1 20081008; EP 1977185 B1 20171213; EP 2851645 A2 20150325; EP 2851645 A3 20150408; EP 2851646 A2 20150325; EP 2851646 A3 20150408; EP 2851646 B1 20210728; JP 2009516122 A 20090416; US 2008271722 A1 20081106; US 7882827 B2 20110208; WO 2007057099 A1 20070524

DOCDB simple family (application)
DE 102005055481 A 20051118; CN 200680042576 A 20061026; EP 06828871 A 20061026; EP 14193540 A 20061026; EP 14193543 A 20061026; EP 2006010343 W 20061026; JP 2008540483 A 20061026; US 9348106 A 20061026