

Title (en)

Gas heat exchanger, especially exhaust gas

Title (de)

Gaswärmetauscher, insbesondere Abgaswärmetauscher

Title (fr)

Echangeur thermique pour gaz, en particulier les gaz d'échappement d'un moteur

Publication

EP 1795732 A1 20070613 (FR)

Application

EP 06025329 A 20061207

Priority

ES 200503024 A 20051209

Abstract (en)

The exchanger has parallel pipes arranged inside a casing, through which gases flow to be cooled by thermal exchange with a refrigeration fluid. The pipes are connected between two support plates (7) anchored at both ends of the casing, where the casing and the support plates have a substantially rectangular cross-section. Each support plate includes protuberances arranged in proximity to a peripheral zone, where the protuberances (9) includes raised portions that come into contact with a peripheral surface area of the casing.

IPC 8 full level

F02M 25/07 (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP ES US)

F02M 26/28 (2016.02 - EP US); **F02M 26/32** (2016.02 - EP US); **F28F 9/0219** (2013.01 - EP ES US); **F28D 21/0003** (2013.01 - EP US); **F28F 2275/08** (2013.01 - EP US); **F28F 2280/04** (2013.01 - EP US)

Citation (search report)

- [Y] JP 2002327996 A 20021115 - DENSO CORP
- [Y] DE 2036398 A1 19710204
- [A] JP H09310996 A 19971202 - USUI INTERNATIONAL INDUSTRY

Cited by

WO2019175433A1

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

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1795732 A1 20070613; **EP 1795732 B1 20100929**; AT E483104 T1 20101015; DE 602006017158 D1 20101111; ES 2315067 A1 20090316; ES 2315067 B1 20091110; ES 2355484 T3 20110328; US 2007131400 A1 20070614

DOCDB simple family (application)

EP 06025329 A 20061207; AT 06025329 T 20061207; DE 602006017158 T 20061207; ES 06025329 T 20061207; ES 200503024 A 20051209; US 63583506 A 20061208