

Title (en)

FLOW CHANNEL FOR A HEAT EXCHANGER, AND HEAT EXCHANGER COMPRISING SUCH FLOW CHANNELS

Title (de)

STRÖMUNGSKANAL FÜR EINEN WÄRMEÜBERTRAGER UND WÄRMEÜBERTRAGER MIT DERARTIGEN STRÖMUNGSKANÄLEN

Title (fr)

CANAL D'ÉCOULEMENT POUR DISPOSITIF DE TRANSFERT DE CHALEUR ET DISPOSITIF DE TRANSFERT DE CHALEUR COMPRENANT DE TELS CANAUX D'ÉCOULEMENT

Publication

EP 1682842 B1 20140604 (DE)

Application

EP 04786965 A 20040920

Priority

- EP 2004010516 W 20040920
- DE 10350418 A 20031028

Abstract (en)

[origin: DE102004045923A1] Flow channel for a heat exchanger containing a medium flowing in a flow direction (P) comprises two opposite-lying parallel heat exchanger surfaces (F1) provided with a structure formed by structural elements (13, 13') that protrude into the flow channel perpendicularly to the flow direction. At least two rows (17-20) with structural elements on opposite-lying heat exchanger surfaces overlap each other. An independent claim is also included for a heat exchanger, especially an exhaust gas cooling device for a motor vehicle. Preferred Features: At least one structural element is elongated, especially rectangular, with a linear longitudinal axis.

IPC 8 full level

F28F 13/12 (2006.01); **F28F 1/40** (2006.01); **F28F 3/04** (2006.01)

CPC (source: EP KR US)

F28F 1/40 (2013.01 - EP KR US); **F28F 3/04** (2013.01 - EP KR US); **F28F 13/02** (2013.01 - EP US); **F28F 13/12** (2013.01 - EP KR US); **F28D 21/0003** (2013.01 - EP US)

Citation (examination)

- JP H09101094 A 19970415 - SUMITOMO PRECISION PROD CO
- EP 1256772 A2 20021113 - BEHR GMBH & CO [DE]
- DE 19526917 A1 19970123 - FIEBIG MARTIN PROF DR ING [DE]

Cited by

DE102017223616A1; WO2017140851A1; US11421949B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 102004045923 A1 20050525; BR PI0415965 A 20070123; BR PI0415965 B1 20180612; CN 1875240 A 20061206; CN 1875240 B 20101013; EP 1682842 A1 20060726; EP 1682842 B1 20140604; EP 2267393 A2 20101229; EP 2267393 A3 20120704; EP 2267393 B1 20170628; ES 2496943 T3 20140922; JP 2007510122 A 20070419; KR 20060101481 A 20060925; US 2007107882 A1 20070517; US 2012067557 A1 20120322; WO 2005052490 A1 20050609

DOCDB simple family (application)

DE 102004045923 A 20040920; BR PI0415965 A 20040920; CN 200480031866 A 20040920; EP 04786965 A 20040920; EP 10181882 A 20040920; EP 2004010516 W 20040920; ES 04786965 T 20040920; JP 2006537087 A 20040920; KR 20067008361 A 20060428; US 201113302746 A 20111122; US 57743604 A 20040920