

Title (en)

HEAT EXCHANGER COMPRISING TUBES WITH GROOVED FINNS

Title (de)

WÄRMETAUSCHER MIT RÖHREN MIT GERIFFELTEN RIPPEN

Title (fr)

ÉCHANGEUR DE CHALEUR COMPRENANT DES TUBES A AILETTES RAINURÉES

Publication

EP 2379977 B1 20121017 (FR)

Application

EP 09716192 A 20090505

Priority

- FR 2009050832 W 20090505
- FR 0858864 A 20081219

Abstract (en)

[origin: US2010155041A1] Tube heat exchanger comprising finned tubes, wherein the tubes extend in a certain axial direction and are provided with heat exchange fins. Each fin has a heat exchange surface surrounding a tube that extends in a certain radial direction in relation to the tube and which is relief structured to form grooves spaced apart from one another in said radial direction. The grooves of a fin have different dimensions that decrease on moving away from the tube in said radial direction so as to form a guide for a fluid around the tube.

IPC 8 full level

F28F 1/24 (2006.01); **F28F 13/06** (2006.01)

CPC (source: EP KR US)

F28F 1/24 (2013.01 - EP KR US); **F28F 13/06** (2013.01 - EP KR US); **F28F 2215/10** (2013.01 - EP US)

Cited by

DE102014108209A1; WO2015188812A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

US 2010155041 A1 20100624; US 8376033 B2 20130219; BR PI0906068 A2 20150630; BR PI0906068 B1 20191203; CA 2747353 A1 20100624; CA 2747353 C 20150811; CN 101861506 A 20101013; CN 101861506 B 20120111; EP 2379977 A1 20111026; EP 2379977 B1 20121017; ES 2399504 T3 20130401; FR 2940422 A1 20100625; FR 2940422 B1 20101203; HK 1149073 A1 20110923; KR 101177726 B1 20120828; KR 20100103777 A 20100928; PL 2379977 T3 20130329; RU 2011129831 A 20130127; RU 2494330 C2 20130927; WO 2010070216 A1 20100624

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US 46386109 A 20090511; BR PI0906068 A 20090505; CA 2747353 A 20090505; CN 200980000227 A 20090505; EP 09716192 A 20090505; ES 09716192 T 20090505; FR 0858864 A 20081219; FR 2009050832 W 20090505; HK 11103193 A 20110329; KR 20097020333 A 20090505; PL 09716192 T 20090505; RU 2011129831 A 20090505