

Title (en)
HEAT EXCHANGER

Title (de)
WÄRMETAUSCHER

Title (fr)
ÉCHANGEUR DE CHALEUR

Publication
EP 3341670 A1 20180704 (FR)

Application
EP 16750715 A 20160802

Priority
• FR 1557906 A 20150825
• EP 2016068423 W 20160802

Abstract (en)
[origin: WO2017032567A1] The present invention concerns a heat exchanger comprising: # a plurality of flat tubes (2) arranged parallel to each other, and in which there flows a first fluid, # spacers (3) arranged between said flat tubes (2), said spacers (3) having a periodic profile of which the ends (30) are in contact with the outer surface of said flat tubes (2), said spacers (3) being traversed by a second fluid, the flat tubes (2) comprising grooves (20) on the outer surface of same, the ends (30) of the spacers (3) and said grooves (20) having a matching shape and length, such that said ends (30) of the spacers (3) insert into said grooves (20).

IPC 8 full level
F28F 3/02 (2006.01); **F28F 3/04** (2006.01)

CPC (source: CN EP US)
F02B 29/0456 (2013.01 - EP US); **F28F 3/025** (2013.01 - CN EP US); **F28F 3/027** (2013.01 - CN EP US); **F28F 3/046** (2013.01 - CN EP US); **B60K 11/06** (2013.01 - US); **Y02T 10/12** (2013.01 - EP)

Citation (search report)
See references of WO 2017032567A1

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)
WO 2017032567 A1 20170302; CN 108235723 A 20180629; EP 3341670 A1 20180704; FR 3040478 A1 20170303; FR 3040478 B1 20171215; US 2019041140 A1 20190207

DOCDB simple family (application)
EP 2016068423 W 20160802; CN 201680062011 A 20160802; EP 16750715 A 20160802; FR 1557906 A 20150825; US 201615754677 A 20160802