

Title (en)  
HEAT EXCHANGER INSERT

Title (de)  
WÄRMETAUSCHEREINSATZ

Title (fr)  
INTERCALAIRE D'ECHANGEUR DE CHALEUR

Publication  
**EP 2893282 A1 20150715 (FR)**

Application  
**EP 13763186 A 20130910**

Priority  
• FR 1258476 A 20120910  
• EP 2013002711 W 20130910

Abstract (en)  
[origin: WO2014037122A1] The invention relates to an insert intended to encourage exchange of heat between a first fluid and a second fluid, said insert comprising a concertina-folded plate (2) for the circulation of the first fluid, said plate being intended to come into thermal contact with circulation channels for the second fluid, said plate comprising a multiplicity of ridges (9) able to divert the circulation of said first fluid from a flow direction (5), said insert having a density of ridges (9) that increases in said flow direction. The invention also relates to a heat exchange bundle comprising a plurality of such inserts, and to a heat exchanger for a cooling circuit comprising such a heat exchange bundle.

IPC 8 full level  
**F28F 3/02** (2006.01); **F28D 1/03** (2006.01)

CPC (source: EP KR US)  
**F28D 1/0341** (2013.01 - EP KR US); **F28F 3/027** (2013.01 - EP KR US); **F28F 3/046** (2013.01 - KR US); **F28D 2021/0082** (2013.01 - EP KR US); **F28F 2215/04** (2013.01 - EP KR US)

Citation (search report)  
See references of WO 2014037122A1

Citation (examination)  
• JP 2003042677 A 20030213 - CALSONIC KANSEI CORP  
• US 2010230085 A1 20100916 - FENG YI [CA], et al

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 2014037122 A1 20140313**; EP 2893282 A1 20150715; FR 2995397 A1 20140314; FR 2995397 B1 20140822; KR 20150043388 A 20150422; US 2015241142 A1 20150827

DOCDB simple family (application)  
**EP 2013002711 W 20130910**; EP 13763186 A 20130910; FR 1258476 A 20120910; KR 20157006114 A 20130910; US 201314426999 A 20130910