

Title (en)
Heat exchanger

Title (de)
Wärmetauscher

Title (fr)
Échangeur de chaleur

Publication
EP 2713135 A1 20140402 (EN)

Application
EP 13186171 A 20130926

Priority
KR 20120108314 A 20120927

Abstract (en)
A heat exchanger having an improved structure which allows refrigerant tubes to be firmly bonded to heat exchange fins. The heat exchanger includes a plurality of refrigerant tubes spaced apart from each other, headers coupled to both end portions of the refrigerant tubes, and heat exchange fins coupled to the refrigerant tubes and disposed spaced apart from each other. Each of the heat exchange fins includes insertion grooves allowing the refrigerant tubes to be inserted therein, and bonding plates bonded to the refrigerant tubes. Each of the bonding plates includes a first bonding portion curved from one end portion thereof in a first direction and bonded to one surface of a corresponding one of the refrigerant tubes, and a second bonding portion curved from the other end portion thereof in a second direction and bonded to the other surface of the corresponding one of the refrigerant tubes.

IPC 8 full level
F28F 1/32 (2006.01)

CPC (source: EP KR US)
F28F 1/10 (2013.01 - KR); **F28F 1/12** (2013.01 - US); **F28F 1/32** (2013.01 - EP KR US); **F28F 1/325** (2013.01 - EP US);
F28F 2215/12 (2013.01 - EP US)

Citation (search report)
• [A] US 2006175047 A1 20060810 - HATTORI TAKASHI [JP], et al
• [A] GB 2409511 A 20050629 - CALSONIC KANSEI UK LTD [GB]
• [A] JP 2007155181 A 20070621 - MATSUSHITA ELECTRIC IND CO LTD
• [A] JP 2008170041 A 20080724 - SHOWA DENKO KK
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EP3480547A4; US11313630B2

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

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US 2014083664 A1 20140327

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US 201314031568 A 20130919