

Title (en)
Heat exchanger

Title (de)
Wärmetauscher

Title (fr)
Échangeur de chaleur

Publication
EP 2784428 B1 20190220 (EN)

Application
EP 14161454 A 20140325

Priority
KR 20130031408 A 20130325

Abstract (en)
[origin: EP2784428A1] Provided is a heat exchanger. The heat exchanger includes a plurality of refrigerant tubes through which a refrigerant flows, a header including a tube connection part coupled to the plurality of refrigerant tubes and a refrigerant inflow part, a first pipe provided in the header to define a first flow space for the refrigerant, a second pipe surrounding the outside of the first pipe to define a second flow space for the refrigerant, and a communication hole defined in the first or second pipe to allow the refrigerant to pass therethrough.

IPC 8 full level
F28D 1/053 (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP KR US)
F28D 1/0435 (2013.01 - US); **F28D 1/05383** (2013.01 - EP US); **F28D 1/05391** (2013.01 - EP US); **F28F 1/32** (2013.01 - KR); **F28F 9/013** (2013.01 - KR); **F28F 9/02** (2013.01 - KR); **F28F 9/0273** (2013.01 - EP US); **F28F 13/12** (2013.01 - US); **F28D 2021/0068** (2013.01 - EP US); **F28F 9/0253** (2013.01 - EP US)

Citation (opposition)
Opponent : Valeo Systèmes Thermiques
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• DE 102008023055 A1 20081127 - BEHR GMBH & CO KG [DE]
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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

DOCDB simple family (publication)
EP 2784428 A1 20141001; **EP 2784428 B1 20190220**; CN 104075496 A 20141001; KR 20140116626 A 20141006; US 2014284035 A1 20140925; US 2016377347 A1 20161229

DOCDB simple family (application)
EP 14161454 A 20140325; CN 201410112843 A 20140325; KR 20130031408 A 20130325; US 201414223184 A 20140324; US 201615259878 A 20160908