

Title (en)

HEAT EXCHANGING APPARATUS AND AIR CONDITIONING APPARATUS

Title (de)

WÄRMETAUSCHERVORRICHTUNG UND KLIMAAANLAGE

Title (fr)

APPAREIL D'ÉCHANGE DE CHALEUR ET APPAREIL DE CONDITIONNEMENT D'AIR

Publication

EP 2942595 B1 20190710 (EN)

Application

EP 15160937 A 20150326

Priority

JP 2014074069 A 20140331

Abstract (en)

[origin: EP2942595A1] The heat exchanging apparatus includes a plurality of fins 10 having a plate shape, extending vertically, and arranged horizontally and successively with surfaces of the adjacent pair of fins 10 parallel to each other, and a heat transfer tube 40A inside which a refrigerant flows and which is inserted into a tube hole 10B on each of the plurality of fins 10 while adhering. A plurality of grooves 12 extending from an upper to lower part is formed on the surface of the fin 10 at fixed intervals in an arrangement direction orthogonal to the extending direction thereof, a groove 12 width is 5 μm or more to 200 μm or less, and a distance between edges of the adjacent grooves 12 is 5 μm or more to twice or less the groove 12 width.

IPC 8 full level

F28F 13/18 (2006.01); **F28F 17/00** (2006.01)

CPC (source: EP)

F28F 1/32 (2013.01); **F28F 13/187** (2013.01); **F28F 17/005** (2013.01); **F28D 1/047** (2013.01); **F28F 2245/04** (2013.01); **F28F 2255/20** (2013.01)

Cited by

FR3046755A1; CN109442677A; WO2022068949A1

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 2942595 A1 20151111; **EP 2942595 B1 20190710**; JP 2015197229 A 20151109; JP 6391969 B2 20180919

DOCDB simple family (application)

EP 15160937 A 20150326; JP 2014074069 A 20140331