

Title (en)

HEAT EXCHANGER, IN PARTICULAR FOR A VEHICLE, SPECIFICALLY A MOTOR VEHICLE

Title (de)

WÄRMETAUSCHER, INSBESONDERE FÜR EIN FAHRZEUG, SPEZIELL EIN KRAFTFAHRZEUG

Title (fr)

ÉCHANGEUR DE CHALEUR, EN PARTICULIER POUR VÉHICULE, PLUS PARTICULIÈREMENT POUR DES VÉHICULES AUTOMOBILES

Publication

**EP 3430339 B1 20200129 (FR)**

Application

**EP 17716945 A 20170316**

Priority

- FR 1652307 A 20160318
- FR 2017050604 W 20170316

Abstract (en)

[origin: WO2017158299A2] The invention relates to a heat exchanger comprising a collector plate having a wall equipped with holes, a bundle of tubes in which each tube has a first end that is intended to be housed in the corresponding hole in the collector plate, and a reinforcing part disposed between two tubes close to the first ends thereof.

IPC 8 full level

**F28D 1/053** (2006.01)

CPC (source: EP)

**F28D 1/05325** (2013.01); **F28D 1/05341** (2013.01); **F28F 2225/04** (2013.01); **F28F 2265/26** (2013.01)

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)

**WO 2017158299 A2 20170921; WO 2017158299 A3 20171116**; EP 3430339 A2 20190123; EP 3430339 B1 20200129; FR 3049049 A1 20170922; FR 3049049 B1 20190419

DOCDB simple family (application)

**FR 2017050604 W 20170316**; EP 17716945 A 20170316; FR 1652307 A 20160318