

Title (en)  
A HEAT EXCHANGER

Title (de)  
WÄRMETAUSCHER

Title (fr)  
ÉCHANGEUR DE CHALEUR

Publication  
**EP 3943861 A1 20220126 (EN)**

Application  
**EP 20461548 A 20200723**

Priority  
EP 20461548 A 20200723

Abstract (en)

The present invention provides a heat exchanger for a vehicle that includes a first header, a second header, a first tank, a second tank, heat exchange tubes, a second tube and an intermediate tube. The first tank includes an inlet and an outlet, adapted to be coupled to the first header. The second tank is adapted to be coupled to the second header. Further, the heat exchange tubes are deployed in parallel to each other between the first header and the second header. Further, the adjacent tubes of the plurality of heat exchange tubes form first tubes. The second tube disposed between the first header and the second header, is in fluidic communication with the first set of tubes. Further, the intermediate tube located between the second tube and the first tubes, is configured to block the fluid communication between the first tank and the second tank.

IPC 8 full level  
**F28D 1/053** (2006.01); **F28D 21/00** (2006.01); **F28F 9/00** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP)  
**F28D 1/05375** (2013.01); **F28F 9/02** (2013.01); **F28F 9/0209** (2013.01); **F28F 9/0224** (2013.01); **F28F 9/0248** (2013.01); **F28F 9/0263** (2013.01);  
**F28D 2021/0091** (2013.01); **F28F 9/002** (2013.01)

Citation (search report)

- [X] US 2017328637 A1 20171116 - PAROLA ANDREA [IT]
- [X] WO 2014197960 A1 20141218 - VALEO SISTEMAS AUTOMOTIVOS [BR]
- [A] US 2019063841 A1 20190228 - VALLEE NICOLAS [FR], et al
- [A] EP 3361204 A1 20180815 - RADIADORES ORDONEZ S A [ES]
- [A] GB 1479093 A 19770706 - BARRY WEHMILLER CO

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)  
**EP 3943861 A1 20220126; EP 3943861 B1 20230301; WO 2022017750 A1 20220127**

DOCDB simple family (application)  
**EP 20461548 A 20200723; EP 2021068042 W 20210630**