

Title (en)  
UNIVERSAL HEAT EXCHANGER

Title (de)  
UNIVERSELLER WÄRMETAUSCHER

Title (fr)  
ÉCHANGEUR DE CHALEUR UNIVERSEL

Publication  
**EP 3921587 A4 20221109 (EN)**

Application  
**EP 19914243 A 20190319**

Priority  
• IN 201911004537 A 20190205  
• IN 2019050222 W 20190319

Abstract (en)  
[origin: WO2020161727A1] A heat exchanger (100) having a plurality of plates (101) manufactured preferably but not limiting to the stamping process, the plates has been configured to accommodate the internal fins (106). The plates (101) also define plurality of the passages (102) for flowing at least two fluids. A plurality of conduits (103) fluidly coupled to a first end and second of the end of the plates (101) which allows the flow of the fluids. At least one inlet (104) coupled to a first end, and at least one outlet (105) coupled to the second end of the plurality of plates (101) configured to allow the flow of the fluids wherein each fluid flow in a different direction from the other, a plurality of inner fins (106) disposed on a surface of each of the plurality of plates (101) for increasing the surface to volume ratio of the first and second fluid to achieve pre-defined thermal performance.

IPC 8 full level  
**F28D 9/00** (2006.01); **F28F 3/02** (2006.01); **F28F 3/04** (2006.01)

CPC (source: EP US)  
**F28D 9/005** (2013.01 - EP US); **F28F 3/025** (2013.01 - EP US); **F28F 3/044** (2013.01 - EP); **F28F 3/086** (2013.01 - US); **F28D 2021/0043** (2013.01 - EP US); **F28D 2021/008** (2013.01 - EP US); **F28F 9/0251** (2013.01 - EP); **F28F 2220/00** (2013.01 - EP); **F28F 2225/04** (2013.01 - EP US); **F28F 2265/12** (2013.01 - EP); **F28F 2280/04** (2013.01 - EP)

Citation (search report)  
• [X] US 2017241686 A1 20170824 - SZOSTEK DAWID [FR], et al  
• [X] US 2019017748 A1 20190117 - SUN FAMING [JP], et al  
• [XI] US 4872578 A 19891010 - FUERSCHBACH RAYMOND F [US], et al  
• See references of WO 2020161727A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**WO 2020161727 A1 20200813**; CN 113661370 A 20211116; EP 3921587 A1 20211215; EP 3921587 A4 20221109; US 2022120506 A1 20220421

DOCDB simple family (application)  
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