

Title (en)  
HEAT EXCHANGER

Title (de)  
WÄRMETAUSCHER

Title (fr)  
ÉCHANGEUR DE CHALEUR

Publication  
**EP 4166883 A1 20230419 (EN)**

Application  
**EP 21203292 A 20211018**

Priority  
EP 21203292 A 20211018

Abstract (en)

A heat exchanger comprises a multitude of metal plates. Each of the metal plates has two front faces, on at least one of which a fluid channel is disposed. The front face with a fluid channel serves as a side which another metal plate abuts against, so that the at least two metal plates can be appropriately joined with each other by means of their front faces. The at least two joined metal plates are smelted into one piece by being sintered with high heat. Thus, the whole heat exchanger can be assembled well without an additional joining process for the metal plates, such as screwing or welding.

IPC 8 full level  
**F28F 3/08** (2006.01); **F28F 7/02** (2006.01); **F28F 21/08** (2006.01)

CPC (source: EP)  
**F28D 9/0037** (2013.01); **F28D 9/005** (2013.01); **F28F 3/10** (2013.01); **F28F 7/02** (2013.01); **F28F 21/08** (2013.01); **F28F 2275/06** (2013.01)

Citation (search report)

- [X] US 2015260464 A1 20150917 - COLE BARRY R [US], et al
- [X] US 2021270536 A1 20210902 - SUZUKI YUTAKA [JP], et al
- [X] US 2009258289 A1 20091015 - WEBER DEREK R [US], et al
- [X] EP 2508831 A1 20121010 - ALFA LAVAL CORP AB [SE]
- [X] CN 106813521 A 20170609 - UNIV BEIJING CHEMICAL TECH
- [X] US 5074280 A 19911224 - EVENS LANCE J [US]
- [X] US 5359989 A 19941101 - CHASE THOMAS [US], et al
- [X] EP 1788335 A1 20070523 - METHANOL CASALE SA [CH]
- [X] FR 2754595 A1 19980417 - ZIEMANN SECATHEN [FR]
- [X] US 2003178182 A1 20030925 - PIKOVSKY ANATOLY [US], et al

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

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4166883 A1 20230419**

DOCDB simple family (application)  
**EP 21203292 A 20211018**