

Title (en)

U-type stack type heat exchanger with mixing header

Title (de)

U-Typ-Plattenwärmeaustauscher mit Mischkammer

Title (fr)

Échangeur de chaleur à plaques empilées avec chambre de mélange

Publication

EP 2357329 A2 20110817 (EN)

Application

EP 11000382 A 20110119

Priority

JP 2010015059 A 20100127

Abstract (en)

The heat exchanger performance of a stack type heat exchanger used as an aircraft engine oil cooler or the like is increased. U-turn type layered hot fluid passages having corrugated fins and U-turn type layered cold fluid passages having corrugated fins are alternately stacked to configure a stacked core. Mixing headers are provided to both side surfaces of the stacked core so as to pass a hot fluid which circulates on a first half side and a return path side through the mixing headers outside of the stacked core. The mixing headers mix the hot fluid which circulates in the inside portion of the U-turn passage and the hot fluid which circulates in the outside portion thereof. The hot fluids are mixed between the plural stacked hot fluid passages. The temperature distribution of the hot fluid in the first half and in the passage width direction is made uniform.

IPC 8 full level

F01M 5/00 (2006.01); **F28D 9/00** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP US)

F28D 9/0068 (2013.01 - EP US); **F28F 9/02** (2013.01 - EP US); **F01M 5/002** (2013.01 - EP US); **F28D 2021/0089** (2013.01 - EP US)

Citation (applicant)

- JP 2000097582 A 20000404 - ISHIKAWAJIMA HARIMA HEAVY IND
- JP H0167479 U 19890428

Cited by

EP2924385A4; CN110462329A; EP3726029A1; WO2018178619A1; US11340020B2

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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