

Title (en)

WEAVED CROSS-FLOW HEAT EXCHANGER AND METHOD OF FORMING A HEAT EXCHANGER

Title (de)

GESCHLÄNGELTER KREUZSTROMWÄRMETAUSCHER UND VERFAHREN ZUR HERSTELLUNG EINES WÄRMETAUSCHERS

Title (fr)

ÉCHANGEUR THERMIQUE À FLUX TRANSVERSAL TISSÉ ET PROCÉDÉ DE FORMATION D'UN ÉCHANGEUR DE CHALEUR

Publication

EP 3660434 A1 20200603 (EN)

Application

EP 19207464 A 20191106

Priority

US 201816201321 A 20181127

Abstract (en)

A heat exchanger is disclosed herein that includes three walls (12,14,16) that are each shaped in a wave pattern with the waves that extend in both a first lateral direction and a second lateral direction. A second wall is adjacent to and in contact with a first wall with the waves of the second wall being offset from the waves of the first wall by one-half wavelength in the first direction. The third wall is adjacent to and in contact with the second wall with the waves of the third wall being offset from the waves of the second wall by one-half wavelength in the second direction. The first wall and second wall form a first plurality of flow paths (30B) extending in the second direction, and the second wall and the third wall form a second plurality of flow paths (32B) extending in the first direction.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [X] US 4919200 A 19900424 - GLOMSKI STANISLAS [CA], et al
- [XYI] EP 2607831 A1 20130626 - ROLLS ROYCE PLC [GB]
- [Y] EP 3193125 A1 20170719 - HAMILTON SUNDSTRAND CORP [US]

Cited by

GB2607136A; EP4015956A1; US2022205735A1; US11555659B2

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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