

Title (en)  
A HEAT EXCHANGER

Title (de)  
WÄRMETAUSCHER

Title (fr)  
ÉCHANGEUR DE CHALEUR

Publication  
**EP 4198440 A1 20230621 (EN)**

Application  
**EP 21214332 A 20211214**

Priority  
EP 21214332 A 20211214

Abstract (en)  
A heat exchanger (1) adapted for circulation of a first fluid therein comprising a first manifold group (100) and a second manifold group (200) arranged substantially in parallel with respect to each other, a plurality of tubes (500) extending between the first manifold group (100) and the second manifold group (200), and a third manifold group (300) arranged either at the level of the first manifold group (100), or at the level of the second manifold group (200), also being connected to the plurality of tubes (500), wherein the tubes (500) are arranged in a first stack (501) and a second stack (502), the third manifold group (300) enabling a first fluid U-flow therebetween, wherein the first manifold group (100) comprises two primary fluid compartments (101A, 101B) so that the first primary fluid compartment (101A) is connected directly to the first stack (501), and the second primary fluid compartment (101B) is connected directly to the second stack (502), the first primary fluid compartment (101A) comprising a first fluid inlet channel (180A), and the second primary fluid compartment (101B) comprising a first fluid outlet channel (190A), wherein the second manifold group (200) comprises two secondary fluid compartments (201A, 201B) so that the first secondary fluid compartment (201A) is connected directly to the first stack (501) and the second secondary fluid compartment (201B) is connected directly to the second stack (502), wherein an inlet pass (P<sub>in</sub>) is formed between the first fluid inlet channel (180A) and the first secondary fluid compartment (201A), and wherein an outlet pass (P<sub>out</sub>) is formed between the second secondary fluid compartment (201B) and the first fluid outlet channel (190A).

IPC 8 full level  
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Citation (search report)  
• [X1] US 2008314076 A1 20081225 - ICHIYANAGI SHIGEHARU [JP], et al  
• [X1] US 2005172664 A1 20050811 - CHO JAE-HEON [KR], et al  
• [X1] JP 2007298260 A 20071115 - SANDEN CORP  
• [X1] FR 2965606 A1 20120406 - VALEO SYSTEMES THERMIQUES [FR]  
• [I] EP 1192402 B1 20040616 - VALEO CLIMATISATION [FR]

Designated contracting state (EPC)  
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Designated extension state (EPC)  
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KH MA MD TN

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