

Title (en)
HEAT EXCHANGER

Title (de)
WÄRMETAUSCHER

Title (fr)
ÉCHANGEUR DE CHALEUR

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Abstract (en)
The present invention discloses a heat exchanger (100) comprising a first manifold (102), a second manifold (108) and a plurality of heat exchange tubes (114) providing a fluidal communication between the first and second manifold (102, 108). Each of the tubes (114) comprises an interior surface (118) defined by a sidewall (120), a first end (116A) and a second end (116B) opposite to the first end (116A). Each of the manifolds (102, 108) comprises a tank member (106, 112) and a header plate (104, 110) comprising a plurality of apertures (144) to receive the respective end (116A, 116B) of the tubes (114). At least one intermediate plate (122) is arranged at least at one end (114A, 114B) of the tubes (114). The intermediate plate (122) comprises a plurality of orifices (128) aligning with the arrangement of the tubes (114) and the apertures (144) of the header plate (104, 110).

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Citation (search report)
• [XII] US 2015068716 A1 20150312 - GESKES PETER [DE]
• [XII] US 8844504 B2 20140930 - RADUENZ DAN R [US], et al
• [X] US 2015129188 A1 20150514 - FRANKIEWICZ TOMASZ [PL], et al
• [XII] LU 101675 B1 20210913 - HT HOLDING LUXEMBOURG S A [LU]
• [A] US 7461685 B2 20081209 - OVERBURY ALASTAIR [GB], et al

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