

Title (en)
A HEAT EXCHANGER

Title (de)
WÄRMETAUSCHER

Title (fr)
ÉCHANGEUR DE CHALEUR

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Application
EP 21159043 A 20210224

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Abstract (en)
The object of the invention is, among others, a heat exchanger (1) for heat exchange between a first fluid and a second fluid, comprising: a first header- tank assembly (20) comprising: an inlet for the first fluid, an outlet for the first fluid a first header (21), a first cover (22), wherein the first header- tank assembly (20) forms two fluidly separated channels for the first fluid, a second header- tank assembly (30) comprising: a second header (31), a second cover (32), wherein the second header- tank assembly (30) forms two fluidly connected channels, plurality of tubes (40) forming a first pass (10) and a second pass (12) for the first fluid, wherein the tubes (40) are arranged in two parallel stacks between the first header- tank assembly (20) and the second header-tank assembly (30), characterised in that the second cover (32) is configured to control the flow of the first fluid between the first pass (10) and the second pass (12) by the means of a bypass section (100), the bypass section (100) being formed by a plurality of communication channels, wherein the cross section range of the communication channels is between $X_{\min} = 0.25 \times Y$ and $X_{\max} > 0.50 \times Y$, wherein X is the communication channel cross section dedicated to two tubes located within the same pass (10, 12) with cross section Y which equals to sum of doubled tube hydraulic cross section.

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Citation (search report)

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