Title (en)

Stacked disc heat exchanger

Title (de)

Stapelscheibenwärmeübertrager

Title (fr)

Échangeur thermique à empilement de disques

Publication

EP 2899487 B1 20170215 (DE)

Application

EP 14199018 A 20141218

Priority

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Abstract (en)

[origin: KR20150089958A] The present invention relates to a stacked-plate heat exchanger (1). The heat exchanger comprises: multiple main plates (4), wherein the main plates (4) are stacked in a stacking direction (5) to form a stack (6). The main plates have two openings (7, 8) for a first fluid (2) and two openings (9, 10) for a second fluid (3). The main plates are stacked on top of each other so that in the stack (6), a first shared entrance channel (13) parallel to the stacking direction (5), a first shared exit channel parallel to the stacking direction (5) and multiple first main connection channels (14), which are perpendicular to the stacking direction (5) and connect the first entrance channel (3) to the first exit channel through fluid, can be formed for the first fluid (2) and a second shared entrance channel (15), and a second shared entrance channel (15) parallel to the stacking direction (5), a second shared exit channel parallel to the stacking direction (5) and multiple second main connection channels (16), which are perpendicular to the stacking direction and connect the second entrance channel (15) to the second exit channel through fluid, can be formed for the second fluid (3). If at least one additional plate (17) is provided, optimization for another flow situation can be conducted simply, the additional plate is arranged between the two main plates (4) in the stacking direction (5) to form an additional connection channel (25) in the stack (6), and the additional connection channel is connected through fluid to one among the main connection channels (14, 16) right adjacent in the stacking direction (5).

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