

Title (en)
HEAT EXCHANGER COMPRISING ELEMENTS AND PLATES WITH SURFACE TEXTURING

Title (de)
WÄRMETAUSCHER MIT ELEMENTEN UND PLATTEN MIT OBERFLÄCHENSTRUKTURIERUNG

Title (fr)
ECHANGEUR DE CHALEUR AVEC ELEMENTS ET PLAQUES A TEXTURATION DE SURFACE

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Application
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Abstract (en)
[origin: WO2019122655A1] The invention relates to a heat exchanger of the brazed plate-fin type, comprising a plurality of plates arranged in parallel so as to define a series of passages for the flow of a first fluid which is to exchange heat with at least one second fluid, at least one spacer element (22) being arranged in a passage (33) formed between a first and a second plate (6, 7) and comprising at least one first assembly portion (121) positioned against the first plate (6), said first assembly portion (121) comprising a first pair of opposing secondary surfaces (121a, 121b), one (121a) of which is oriented towards the first plate (6) and the other (121b) is oriented towards the second plate (7), and at least one surface texturing (23) in the form of a porous structure or reliefs formed on a surface of the spacer element (22), a plurality of corrugated fins or legs (123) defining, inside the passage (33), a plurality of channels (26) for the flow of the first fluid, at least one corrugated fin or leg (123) having said surface texturing (23). According to the invention, said first assembly portion (121) has the surface texturing (23) on at least the secondary surface (121a) of the first pair of secondary surfaces, which is oriented towards the first plate (6), and the first plate (6) comprises a first pair of opposing primary surfaces (6a, 6b) and has the surface texturing (23) on at least the primary surface (6b) of said primary surfaces (6a, 6b), which is oriented toward the spacer element (22). The invention also relates to an associated manufacturing method.

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