

Title (en)
HEAT EXCHANGE PANEL

Title (de)
WÄRMETAUSCHERTAFEL

Title (fr)
PANNEAU D'ÉCHANGE THERMIQUE

Publication
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Application
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Abstract (en)
[origin: WO2010083029A2] A heat exchange panel (1) that includes a lower plate (11) and an upper plate (14) that together define a plurality of channels (51) there-between, which are in fluid communication with a plurality of upper plate extension passages (72), is described. The lower plate (11) includes a plurality of lower plate extensions (20) that extend upwardly from the interior surface (17) of the lower plate. Each channel (51) has at least one lower plate extension (20) extending upwardly therefrom. The upper plate (14) includes a plurality of upwardly extending hollow upper plate extensions (32). The aperture (42) and interior hollow space (48) of each upper plate extension (32) is aligned with and receives an upper portion (69) of a single lower plate extension (20) therein. A portion of the interior surfaces (45) that define the interior hollow space (48) of the upper plate extension (32), and a portion of the exterior surfaces (23) of the upper portion (69) of the lower plate extension (20) received within the interior hollow space (48) together define, in each case, an upper plate extension passage (72). Each upper plate extension passage (72) is in fluid communication with a channel (51) residing there-under. In operation, a fluid introduced into a terminal inlet (54) of a channel (51) passes through each upper plate extension channel (72) in fluid communication with that channel, and passes out from the terminal outlet (57) of the channel. The combination of a plurality of upper plate extension passages (72) and channels (51) in common fluid communication provide the heat exchange panel of the present invention with improved heat exchange efficiencies.

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