

Title (en)
MICROCHANNEL HEAT EXCHANGER AND METHODS OF MANUFACTURE

Title (de)
MIKROKANALWÄRMETAUSCHER UND VERFAHREN ZUR HERSTELLUNG

Title (fr)
ÉCHANGEUR DE CHALEUR À MICROCANAUX ET PROCÉDÉS DE FABRICATION

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Application
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Abstract (en)
[origin: US2014246183A1] An apparatus includes a first flow panel and a second flow panel. The first flow panel includes a first flow portion and a second flow portion. The first flow portion defines a flow passageway within which a gas can flow in a first direction. The second flow portion defines a set of microchannels in fluid communication with the flow passageway and within which the gas can flow in a second direction, where the second direction is nonparallel to the first direction. The first flow panel is coupled to the second flow panel to define a heat transfer passageway within which a heat transfer medium can be conveyed in a third direction, where the third direction is opposite the first direction. In such embodiments, the heat transfer passageway is fluidically isolated from the flow passageway and the set of microchannels by a thermally conductive side wall.

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