

89. The microchannel distillation unit of claim 67 wherein the microchannel distillation unit is assembled using a combination of sheets and partial sheets.

90. A microchannel distillation unit, comprising: a liquid channel, a first process microchannel, a second process microchannel, a first vapor channel, a second vapor channel, a third vapor channel, a vapor inlet and a vapor outlet, the first process microchannel and the second process microchannel being adjacent to the liquid channel, the liquid channel comprising a wicking region, part of the wicking

region forming a wall of the first process microchannel and a wall of the second process microchannel, the first vapor channel being adjacent to the first process microchannel, the third vapor channel being adjacent to the second process microchannel, the second vapor channel being adjacent to the first and third vapor channels, the first and third vapor channels being positioned between the first and second process microchannels and the second vapor channel.

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