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ABSTRACT

A vapor chamber including a first plate, second plate, plurality of support structures, and plurality of heat transfer structures is provided. The first plate and the second plate define an interior cavity having a first portion, a pair of second portions, and a pair of third portions. The pair of second portions and pair of third portions surround the first portion. A length of the pair of third portions defines a longitudinal direction and is greater than a width of the pair of second portions. The plurality of heat transfer structures is disposed in the first portion and the plurality of support structures is disposed throughout the interior cavity. A position of the structure length of each of the plurality of heat transfer structures is in line with the longitudinal direction so that working fluid flows from the pair of third portions to and through the first portion unhindered.

