

COLD PLATE AND A METHOD OF MANUFACTURE THEREOF**Abstract**

A cold plate may include a plate body having a thermal conductive side; a plurality of parallel hollow fluid channels running inside the plate body; at least one fluid inlet in direct fluid communication with a first subset of the plurality of parallel hollow fluid channels; at least one fluid outlet in direct fluid communication with a second subset of the plurality of parallel hollow fluid channels; and a porous thermal conductive structure which fluidly connect the first subset of the plurality of parallel hollow fluid channels to the second subset of the plurality of parallel hollow fluid channels, and which is in thermal contact with the thermal conductive side of the plate body. The porous thermal conductive structure may include a plurality of elongate fluid contact surface regions, each may be extending continuously lengthwise along a longitudinal side of respective fluid channel to serve as a fluid interface.

FIG. 1A