

THERMAL CONTROLLER FOR ELECTRONIC DEVICES

ABSTRACT

An apparatus is provided for controlling a temperature of a device by circulating fluid through a heat sink in thermal contact with the device. The apparatus includes a first fluid source (505) including a first fluid having a first temperature, a second fluid source (510) including a second fluid having a second temperature, and a thermal chuck (500) operably connected to the first fluid source and the second fluid source, wherein the thermal chuck is configured to receive the first fluid and the second fluid to be circulated through the heat sink (555). A method is also provided for controlling a temperature of a device in contact with a heat sink. The method includes determining a target temperature (S602), initiating a flow of a fluid from a fluid source (S604, S702), determining temperature data (S606, S704) of the device and the heat sink, and variably adjusting a flow rate (S710, S712) of the fluid to generally maintain the device at the target temperature.

FIG. 1