

ABSTRACT

FAST SUBSTRATE SUPPORT TEMPERATURE CONTROL

Methods and apparatus for controlling the temperature of a substrate support are provided herein. In some embodiments, an apparatus for controlling the temperature of a substrate support may include a first heat transfer loop and a second heat transfer loop. The first heat transfer loop may have a first bath with a first heat transfer fluid at a first temperature. The second heat transfer loop may have a second bath with a second heat transfer fluid at a second temperature. The first and second temperatures may be the same or different. First and second flow controllers may be provided for respectively providing the first and second heat transfer fluids to a substrate support. One or more return lines may couple one or more outlets of the substrate support to the first and second baths for returning the first and second heat transfer fluids to the first and second baths.

Figure 2