ABSTRACT

Method of CVD Plasma Processing with a Toroidal Plasma Processing Apparatus

A plasma processing apparatus includes a vacuum chamber comprising a conduit, a process chamber, and a first gas input port for introducing gas into the vacuum chamber, and a pump port for evacuating gas from the vacuum chamber. A magnetic core surrounds the conduit. An output of an RF power supply is electrically connected to the magnetic core. The RF power supply energizes the magnetic core, thereby forming a toroidal plasma loop discharge in the vacuum chamber. A platen that supports the workpiece during plasma processing is positioned in the process chamber.

(FIG. 2)