

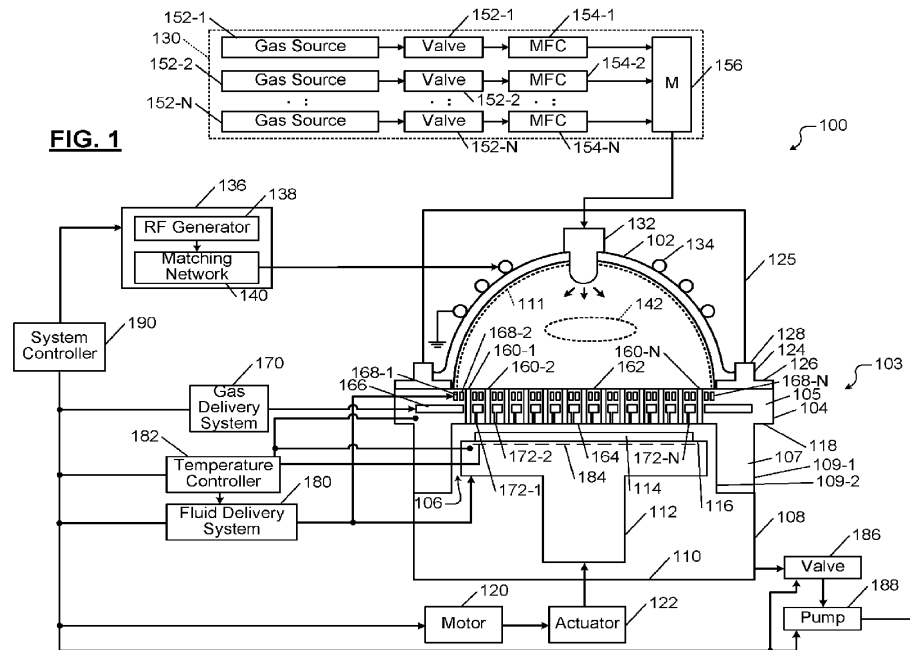
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(54) Title: DOME SHAPED CHAMBER FOR GENERATING IN-SITU CLEANING PLASMA

FIG. 1

(57) **Abstract:** A processing chamber includes a first portion, including a dome, and a second portion. The dome includes a ceramic material and is elliptical in shape. A pedestal to process a substrate is arranged in the second portion. A showerhead is arranged at a base of the dome between the first and second portions. An injector including the ceramic material is mounted on the dome to inject a process gas and a cleaning gas into the dome during substrate processing and cleaning of the processing chamber, respectively. A coil is disposed around a portion of the dome. An RF generator supplies RF power to the coil to generate plasma in the dome during the substrate processing and the cleaning. A controller controls temperatures of the pedestal and the showerhead at respective predetermined temperatures within a predetermined range during the substrate processing and the cleaning.

[Continued on next page]

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