ABSTRACT

Low Cost High Conductance Chamber

A process chamber having high conductance and a method of manufacturing the process chamber are disclosed. The process chamber is machined from a single piece of aluminum where a process cavity and a pump cavity are created by intersecting cylinders. A substrate opening is also created at a bottom of the process cavity to provide conduit for services, such as cooling gas and electrical connections. A large undercut area is formed at a top of the pump cavity between the pump cavity and the process cavity. The undercut extends past the process chamber centerline at the process cavity. A circular saw is used to remove material and create a plenum which extends beyond the process cavity centerline.

Figure 1