

POLISHING HEAD ASSEMBLY HAVING RECESS AND CAP

ABSTRACT

A polishing head assembly for polishing of semiconductor wafers includes a polishing head and a cap. The polishing head has a recess along a bottom portion. The recess has a recessed surface. The cap is positioned within the recess. The cap includes an annular wall secured to the polishing head and a floor joined to the annular wall at a joint. The floor extends across the annular wall, and the floor has an upper surface and a lower surface. The upper surface is spaced from the recessed surface to form a chamber therebetween. A deformation resistance of a portion of the floor proximate the joint is weakened to allow the portion of the floor proximate the joint to deflect relative to the polishing head by a change of pressure in the chamber.

FIG. 4