

ABSTRACT

A SCALABLE MULTI-PAD DESIGN FOR IMPROVED CMP PROCESS

A new method of polishing very large diameter wafers. Multiple polishing pads are provided. Each polishing pad rotates around the Z-axis. Each pad can be individually controlled for Chemical Mechanical Planarization (CMP) process parameters such as pressure, rotation speed, slurry feed and slurry mixture. The planarization process can be controlled or optimized by individual rotating polishing pad or by a grouping of one or more rotating polishing pads. The wafer being processed can be rotated which further reduces the dependence on existing pad conditions which in turn translates into reduced use of slurry and prolonged life-time of the polishing pad.

(FIGURE 1 IS SUGGESTED FOR PUBLICATION)...