ABSTRACT

REMOVAL OF SUBSTRATE PERIMETER MATERIAL

Perimeter material is removed from substrates by stacking the substrates and subjecting them to a plasma etch. In an exemplary application, the perimeter (42) of a silicon wafer dielectric cap (41) (typically silicon nitride) is removed by stacking the wafers (31, 32 ...) in intimate contact, and etching the wafers in a barrel etcher. A well-controlled removal of the cap perimeter is obtained, allowing for a smooth epitaxial deposition at the wafer edge in a subsequent operation. An additional benefit is smoothing of the substrate edge contour, which reduces scratching of wafer cassettes and other handling equipment.

This Sheet Has Been Replaced

