ABSTRACT OF THE DISCLOSURE

METHOD FOR SELECTIVE OXIDE ETCHING IN PRE-METAL DEPOSITION

A method for completely removing dielectric layers formed selectively upon a substrate employed within a microelectronics fabrication from regions wherein closely spaced structures such as self-aligned metal silicide (or salicide) electrical contacts may be fabricated, with improved properties and with attenuated degradation. There is first provided a substrate with employed within a microelectronics fabrication having formed thereon patterned microelectronics layers with closely spaced features. There is then formed a salicide block layer employing silicon oxide dielectric material which may be selectively doped. There is then formed over the substrate a patterned photoresist etch mask layer. There is then etched the pattern of the patterned photoresist etch mask layer employing dry plasma reactive ion etching. An anhydrous etching environment is then employed to completely remove the silicon oxide dielectric salicide block layer with attenuated degradation of the microelectronics fabrication.

(FIGURE 1 IS SUGGESTED FOR PUBLICATION)