ABSTRACT

PROCESS FOR DEVICE USING PARTIAL SOI

A process for manufacturing a buried oxide layer for use in partial SOI structures is described. The process begins with the etching of deep tenches into a silicon body. For a preselected depth below the surface, the inner walls of the trenches are protected and oxidation of said walls is then effected until pinch-off occurs, both inside the trenches and in the material between trenches. The result is a continuous layer of oxide whose size and shape are determined by the number and location of the trenches. Application of the process to the manufacture of a partial SOI RFLDMOS structure is also described together with performance data for the resulting device.

(FIGURE 2 IS SUGGESTED FOR PUBLICATION)