

## **SOI CHIP WITH RECESS-RESISTANT BURIED INSULATOR AND METHOD OF MANUFACTURING THE SAME**

### **ABSTRACT**

A semiconductor-on-insulator structure includes a substrate and a buried insulator stack overlying the substrate. The buried insulator stack includes a first dielectric layer and a recess-resistant layer overlying the first dielectric layer. A second dielectric layer can overlie the recess-resistant layer. A semiconductor layer overlying the buried insulator stack. Active devices, such as transistors and diodes, can be formed in the semiconductor layer.

FIG. 5B