Embedded DRAM on Silicon-On-Insulator Substrate

Abstract

A Semiconductor device is presented which is directed to a method of forming embedded DRAM and logic devices, where the DRAM devices are formed in bulk, single crystalline semiconductor regions (12) and logic devices are formed in silicon-on-insulator ("SOI") regions (26) and where buried, doped glass is used as a mask to form deep trenches (32) for storage in the bulk region (12). The resulting structure is also disclosed.

Fig. 5