ABSTRACT

THYRISTOR-BASED SRAM AND METHOD USING QUASI-PLANAR FINFET PROCESS FOR THE FABRICATION THEREOF

A method for manufacturing an integrated circuit structure includes providing a semiconductor substrate and forming a horizontal semiconductor fin on top of the semiconductor substrate. An access transistor gate and a thyristor gate are then formed on top of the semiconductor substrate and in contact with the horizontal semiconductor fin. An access transistor is formed from at least a portion of the horizontal semiconductor fin and the access transistor gate. A thyristor is formed from at least a portion of the horizontal semiconductor fin and the thyristor gate, the access transistor being in contact with the thyristor.

FIGURE 7