

GEOMETRICAL CONTROL OF DEVICE CORNER THRESHOLD**ABSTRACT**

Corner conduction in a conduction channel of a field effect transistor is controlled by the geometrical configuration of the gate oxide and gate electrode (36) at the sides of the conduction channel. Rounding the corners of the conduction channel or forming depressions at edges of trench structures such as deep or shallow trench isolation structures and/or trench capacitors develop recesses in a surface of a substrate at an interface of active areas and trench structures in which a portion of the gate oxide and gate electrode (36) are formed so that the gate oxide and gate electrode (36) effectively wrap around a portion of the conduction channel of the transistor.

Fig. 9