METHOD OF MANUFACTURING A FINNED SEMICONDUCTOR DEVICE STRUCTURE

ABSTRACT

A method of manufacturing a finned semiconductor device structure is provided. The method begins by providing a substrate having bulk semiconductor material. The method continues by forming a semiconductor fin structure from the bulk semiconductor material, depositing an insulating material overlying the semiconductor fin structure such that the insulating material fills space adjacent to the semiconductor fin structure, and planarizing the deposited insulating material and the semiconductor fin structure to create a flat surface. Thereafter, a replacement gate procedure is performed to form a gate structure transversely overlying the semiconductor fin structure.

FIG. 5