A FIN-TRANSISTOR FORMED ON A PATTERNED STI REGION BY LATE FIN ETCH

ABSTRACT

When forming sophisticated semiconductor devices, three-dimensional transistors in combination with planar transistors may be formed on the basis of a replacement gate approach and self-aligned contact elements by forming the semiconductor fins in an early manufacturing stage, ie. upon forming shallow trench isolations wherein the final electrically effective height of the semiconductor fins may be adjusted after the provision of self-aligned contact elements and during the replacement gate approach.

Figure 2o