

METHODS OF FORMING FINS FOR A FINFET SEMICONDUCTOR DEVICE USING A MANDREL OXIDATION PROCESS

ABSTRACT OF THE DISCLOSURE

One illustrative method disclosed herein includes forming a mandrel structure (11A) above a semiconductor substrate (10), performing an oxidation process to oxidize at least a portion of the mandrel structure so as to thereby define oxidized regions (24) on the mandrel structure, removing the oxidized regions to thereby defined a reduced thickness mandrel structure (11B), forming a plurality of fins (28A) on the reduced thickness mandrel structure and performing an etching process to selectively remove at least a portion (11R) of the reduced thickness mandrel structure so as to thereby expose at least a portion of each of the fins (28A).

Figure 1K