METHODS OF PATTERNING FEATURES IN A STRUCTURE USING MULTIPLE SIDEWALL IMAGE TRANSFER TECHNIQUE

ABSTRACT

Disclosed herein are methods of patterning features in a structure, such as a layer of material used in forming integrated circuit devices or in a semiconducting substrate, using a multiple sidewall image transfer technique. In one example, the method includes forming a first mandrel above a structure, forming a plurality of first spacers adjacent the first mandrel, forming a plurality of second mandrels adjacent one of the first spacers, and forming a plurality of second spacers adjacent one of the second mandrels. The method also includes performing at least one etching process to selectively remove the first mandrel and the second mandrels relative to the first spacers and the second spacers and thereby define an etch mask comprised of the first spacers and the second spacer and performing at least one etching process through the etch mask on the structure to define a plurality of features in the structure.

Figure 2J