A METHOD FOR FORMING A HARD MASK FOR GATE ELECTRODE PATTERNING AND CORRESPONDING DEVICE

ABSTRACT

A method for forming a hard mask for gate electrode patterning in a semiconductor device is disclosed. The method includes providing a polysilicon layer to be etched and forming over the polysilicon layer, a nitride hardmask with a relatively high etch rate to hydrofluoric acid, as compared to the etch rate of silicon oxide. The polysilicon can then be patterned using the hardmask and the hardmask can be removed using hydrofluoric acid.

Figure 1