Abstract

Method for reducing and homogenizing the thickness of a semiconductor layer which lies on the surface of an electrically insulating material

The invention relates to a method for reducing and homogenizing the thickness of a semiconductor layer which lies on the surface of an electrically insulating material, wherein the surface of the semiconductor layer is exposed to the action of an etchant whose redox potential is adjusted as a function of the material and the desired final thickness of the semiconductor layer, so that the material erosion per unit time on the surface of the semiconductor layer due to the etchant becomes less as the thickness of the semiconductor layer decreases and is only from 0 to 10% of the thickness per second when the desired thickness is reached, and wherein the method is carried out without the action of light or the application of an external electrical voltage.