Abstract

Method for producing a nonvolatile memory cell.

A method for producing a nonvolatile memory cell is described. The desired polysilicon structure is masked by an oxidation-inhibiting layer, preferably a nitride layer. The polysilicon above the source/drain regions and field regions is then converted into silicon dioxide. At the same time, filling with silicon dioxide is effected between adjacent polysilicon paths. The field oxide thickness is increased by the conversion of polysilicon in the field regions, too. A second polysilicon layer is applied over a field region, with inclusion of the oxidation-inhibiting layer present there. One electrode of the capacitor is produced therefrom by means of marking and etching, the first polysilicon situated under the oxidation-inhibiting layer forming the other electrode and the oxidation-inhibiting layer forming the dielectric. The advantages of the invention consist in a less complex masking and etching technique and also improved reliability of the components.