Abstract

Method for the production of complementary MOS transistors

The method proposes that after the formation of field insulation zones (2) in a silicon substrate (1) and after the structuring of a gate electrode (3) and of a gate oxide (4), a first mask (6) is produced with a window (7) which defines a first transistor region in which subsequently, by means of implantation steps, firstly a trough (10) is produced with atoms of a first conductivity type and afterwards the source zone and the drain zone (20, 21) of the transistor are produced by implantation of atoms of a second conductivity type. Afterwards, the first mask is removed and a second mask (30) is produced which defines a second window (31) for a second transistor region in which subsequently a second trough (33) is produced by implantation of atoms of a second conductivity type, and a source zone and a drain zone (40, 41) for the second transistor are produced by implantation of atoms of a first conductivity type. As a result of the blockwise implantation steps for each transistor type using one mask in each case, the method manages with a total of four masks in the basic process.

FIG 3