Abstract

Method for producing and method for processing a semiconductor wafer

The invention relates to a method for processing a semiconductor wafer, comprising a polishing process A, which effects material-removing processing of both sides of the semiconductor surface simultaneously and in which a polishing pad is used which contains no substances with abrasive action, and in which a polishing agent is added which contains substances with abrasive action; and a polishing process B, which effects material-removing processing of either one or both sides of the semiconductor wafer and in which a polishing pad is used which has a microstructured surface and which contains no materials coming into contact with the semiconductor wafer which are harder than the semiconductor material, and in which a polishing agent is added which has a pH value of greater than or equal to 10 and which contains no substances with abrasive action. The invention furthermore relates to a method for producing a semiconductor wafer, comprising the following steps in the order indicated: (a) separating a semiconductor single crystal into wafers; (b) simultaneously processing both sides of the semiconductor wafer by means of chip-removing processing; (c) polishing the semiconductor wafer, comprising a polishing process A and a polishing process B; (d) chemical mechanical polishing of one side of the semiconductor wafer, wherein less than 1 µm is removed.

Fig. 1