Method for producing a semiconductor wafer

Abstract

The invention relates to a method for producing a semiconductor wafer, comprising in the following order: (a) removing material from both sides of the semiconductor wafer separated from a monocrystal; (b) chamfering the edge of the semiconductor wafer; (c) grinding the front and the back of the semiconductor wafer, wherein one side of the semiconductor wafer is held by means of a wafer holder, while the other side is worked with a grinding tool; (d) polishing at least one side of the semiconductor wafer with a polishing cloth that contains firmly bound abrasives; (e) treating both sides of the semiconductor wafer with an etching medium, wherein the material removal amounts to no more than 1 µm per side of the semiconductor wafer; (f) polishing a front of the semiconductor wafer using a polishing cloth containing firmly bound abrasives and at the same time polishing a back of the semiconductor wafer with a polishing cloth containing no abrasives, wherein however a polishing agent containing an abrasive is placed between the polishing cloth and the back of the semiconductor wafer; (g) polishing the edge of the semiconductor wafer; (h) polishing the back of the semiconductor wafer with a polishing cloth that contains firmly bound abrasives and at the same time polishing the front of the semiconductor wafer with a polishing cloth that contains no firmly bound abrasives, wherein a polishing agent containing an abrasive is placed between the polishing cloth and the front of the semiconductor wafer.