Abstract

Method for Producing a Semiconductor Wafer

A method for producing a semiconductor wafer, comprising:

a) providing a semiconductor wafer by cutting a silicon rod into wafers;

b) rounding the edge of the semiconductor wafer, so that the semiconductor wafer comprises plane surfaces on the frontside and backside and rounded oblique surfaces in the edge region;

c) polishing the frontside and backside of the semiconductor wafer, the frontside polishing comprising chemical-mechanical polishing using a polishing pad which is free of abrasive fixed in the polishing pad; the backside polishing of the semiconductor wafer being carried out in three steps, in each case using a polishing pad which contains an abrasive substance bound in the polishing pad and is pressed with a polishing pressure onto the backside of the semiconductor wafer, a polishing agent which is free of solids being introduced between the polishing pad and the backside of the semiconductor wafer in the first step, while a polishing agent which contains abrasive substances is introduced in the second and third steps, a polishing pressure of 8-15 psi in the first and second steps being reduced to 0.5-5 psi in the third step.

Figure-1.