Abstract

Method for Polishing both sides of a Semiconductor Wafer

The invention relates to a method for polishing both sides of a semiconductor wafer, comprising the following steps in the order specified:

a) polishing of a backside of the semiconductor wafer on a polishing pad which contains an abrasive fixed in the polishing pad, a polishing agent solution which is free of solids being introduced between the backside of the semiconductor wafer and the polishing pad during the polishing step;

b) stock polishing of the frontside of the semiconductor wafer on polishing pad which contains an abrasive fixed in the polishing pad, a polishing agent solution which is free of solids being introduced between the frontside of the semiconductor wafer and the polishing pad during the polishing step;

c) removal of the microroughness and microdamage from the frontside of the semiconductor wafer by polishing the frontside the semiconductor wafer on a polishing pad, a polishing agent solution which contains abrasives being introduced between the frontside of the semiconductor wafer and the polishing pad during the polishing step;

d) final polishing of the frontside of the semiconductor wafer by polishing the frontside of the semiconductor wafer on a polishing pad which contains no abrasive fixed in the polishing pad, a polishing agent solution which contains abrasives being introduced between the frontside of the semiconductor wafer and the polishing pad during the polishing step.

Fig. 1