ABSTRACT

A method of manufacturing a semiconductor wafer wherein a film is formed on a back surface of a starting semiconductor wafer formed with circuits in a front surface thereof. To prevent the semiconductor wafer from warping even when it is worked as very thin as 100 μm or below and to form the film uniformly on the back surface of the semiconductor wafer, the method includes a unification step of supporting the front surface of the semiconductor wafer on a support baseplate having a flat support surface, and then unifying the support baseplate and the semiconductor wafer with each other; a grinding work step of grinding the back surface of the semiconductor wafer to thin; and a film formation step of forming a film on the back surface of the semiconductor wafer with use of a film formation apparatus; wherein a protective tape capable of being torn off is stuck onto a back surface of the support baseplate at said unification step, so as to perform the subsequent grinding work step with the protective tape borne on the support baseplate; and a protective-tape tearing-off and removal step of tearing off and removing the protective tape is carried out before performing said film formation step.

Figure 3.