Abstract of the Disclosure

A method of processing a semiconductor wafer having a large number of rectangular areas sectioned by streets arranged in a lattice form on the front surface, circuits being formed in the respective areas. This method comprises the step of mounting a semiconductor wafer on a protective substrate in such a manner that the front surface of the semiconductor wafer is opposed to one side of the protective substrate having a large number of pores in at least its central area prior to the grinding of the back surface of the semiconductor wafer.