

ABSTRACT

The present disclosure relates to the technical field of substrate polishing, and in particular to a substrate polishing device and a method of using the same. The substrate polishing device includes a polishing head and a suction disk. A first gas passage is provided in the polishing head. The top of the suction disk is connected to the bottom of the polishing head, and the bottom of the suction disk is provided with a pore in communication with the first gas passage, and a contact surface around the pore. The substrate is directly held with suction through the negative pressure of the pore, shortening the loading time of the substrate on the polishing head. The suction force from the pore and the frictional force on the contact surface may cause the substrate to be firmly held at the bottom of the suction disk, and thus there is no need for a retaining ring, thereby reducing the grinding costs. In addition, when unloading the substrate, the first gas passage may not provide negative pressure to the pore, or it may provide a gas pressure to the pore, so that the substrate can be quickly unloaded, thereby reducing the overall time of the grinding process and improving the efficiency of the grinding process.

[Fig. 1]