ABSTRACT

The present disclosure relates to the technical field of semiconductor polishing. There is provided a gimbal joint, comprising: a guide shaft; and an engagement disk at one end of the guide shaft, wherein the disk surface of the engagement disk is perpendicular to the guide shaft; wherein the engagement disk, on a side facing away from the guide shaft, comprises, from inside to outside along a radial direction, at least two levels of stepped surfaces, so as to allow an elastic deformation of the disk surface for balancing a parallelism error between a polishing head and a polishing pad. The gimbal joint provided by the present disclosure has at least two levels of stepped surfaces on the disk surface of the engagement disk, so that the engagement disk has the function of a disk spring, and the engagement disk may be deformed elastically when balancing the parallelism error between the polishing head and the polishing pad, avoiding plastic deformation or cracking of the engagement disk during use, thereby preventing air leakage and avoiding failure of the polishing head.

[Fig. 1]