

CLEANING APPARATUS AND GAS NOZZLE DEVICE, GAS PATH DEVICE, CONTROL METHOD, INTERFACE CIRCUIT AND CONTROL SYSTEM THEREOF

ABSTRACT

Provided are a cleaning apparatus for cleaning a wafer, and a gas nozzle device, a gas path device, a control method, an interface circuit and a control system thereof, which are applied to the technical field of semiconductor manufacturing equipment. The gas nozzle device includes a gas port assembly, an upper assembly, and a lower assembly. A connection portion of the gas port assembly is press-fitted between the upper assembly and the lower assembly, and the upper assembly and the lower assembly are fixedly mounted on a load plate via fixing screws. Therefore, the overall structure of the gas nozzle is simple, compact, and reliable, which facilitates rapid deployment and maintenance of the gas nozzle in a load port. Moreover, a rapid sealed docking can be achieved between the gas nozzle and a gas port of a FOUP with low docking difficulty and short time, so that the gas nozzle is very suitable for application in a cleaning apparatus of a load port in a semiconductor factory, thereby improving the operational efficiency of the cleaning apparatus in the load port, and ultimately improving the efficiency of wafer exchange through the load port.

Fig 4.