

ABSTRACT

A wafer cleaning apparatus provided by the present invention comprises a rotary shaft, a chuck arranged on the top of the rotary shaft for retaining the wafer, a fixed shaft coaxially passed through the rotary shaft, and an upper end cover and a lower end cover that block the top and bottom of the fixed shaft respectively. Wherein, the fixed shaft is a hollow shaft with at least one circle of exhaust holes provided on the wall of the fixed shaft. The lower end cover is arranged with a gas inlet port, through which a protective gas is provided to the interior of the fixed shaft. The protective gas forms a positive pressure in the annular space between the fixed shaft and the rotary shaft through the at least one circle of exhaust holes. The present invention provides positive pressure protective gas to the spacing between the fixed shaft and the rotary shaft by opening exhaust holes on the wall of the fixed shaft. A gas seal is formed to prevent contaminants, such as particles and metals, generated in the bottom area of the rotary shaft from diffusing to the back side of the wafer through the annular space between the fixed shaft and the rotary shaft, thereby improving the cleanliness of the back side of the wafer after cleaning.