

ABSTRACT

The present disclosure provides a gas mixing device including a gas mixing component, in which a gas inlet end of a first gas intake passage and a gas inlet end of a second gas intake passage are communicated with a gas outlet end of a first gas intake pipeline and a gas outlet end of a second gas intake pipeline, respectively; a gas outlet end of the first gas intake passage and a gas outlet end of the second gas intake passage are both communicated with an annular gas mixing passage; a gas outlet end of the annular gas mixing passage is configured to be communicated with a process chamber of a semiconductor process apparatus; and a gas outgoing direction of the first gas intake passage and a gas outgoing direction of the second gas intake passage are set to enable gases, which respectively flow into the annular gas mixing passage from the gas outlet end of the first gas intake passage and the gas outlet end of the second gas intake passage, to rotationally flow in a same direction along a circumferential direction of the annular gas mixing passage when being mixed. The gas mixing device and a semiconductor process apparatus provided in the present disclosure can not only shorten gas mixing time and increase gas mixing efficiency, but also effectively improve mixing uniformity and product performance.

Fig. 11