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(54) **Title:** SEMICONDUCTOR PROCESS DEVICE AND WAFER SUPPORT STRUCTURE THEREOF

(54) 发明名称: 半导体工艺设备及其晶圆支撑结构

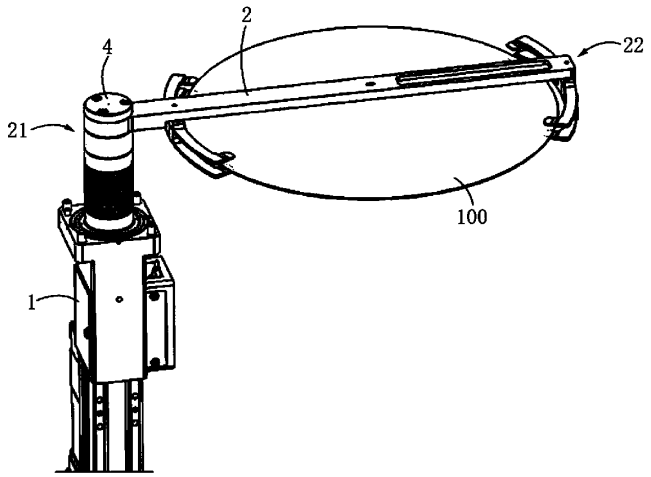


图 1A

(57) **Abstract:** The present application provides a semiconductor process device and a wafer support structure thereof. The wafer support structure comprises: a height-adjusting assembly, a supporting assembly, an expansion assembly and an adjusting assembly. The height-adjusting assembly comprises a height-adjusting shaft, and the top surface of the height-adjusting shaft is provided with a mounting section; a first end of the supporting assembly is provided with a mounting hole fitted in the mounting section; an inner peripheral wall of the mounting hole is spaced apart from an outer peripheral wall of the mounting section to form an adjusting space; the expansion assembly is fitted at the outer periphery of the mounting section and located in the adjusting space; the adjusting assembly is connected to the supporting assembly, and a part of the adjusting assembly is located in the adjusting space and compresses the

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expansion assembly to make the expansion assembly deform, so as to lock the mounting section and the supporting assembly; moreover, the adjusting assembly is configured to be able to adjust the degree of compression of the expansion assembly at different positions in the circumferential direction of the mounting hole, so as to adjust the levelness and/or the midline angle of the supporting assembly. According to the present application, the horizontal adjustment of the supporting assembly can be quickly realized, and the costs of disassembly and assembly as well as maintenance are reduced.

(57) 摘要：本申请提供一种半导体工艺设备及其晶圆支撑结构。该晶圆支撑结构包括：升降组件、支撑组件、胀紧组件及调节组件,升降组件包括升降轴，升降轴的顶面设置有安装段；支撑组件的第一端设置有套设于安装段的安装孔；安装孔的内周壁与安装段的外周壁间隔设置以形成有调节空间；胀紧组件套设于安装段外周，且位于调节空间内；调节组件与支撑组件连接，且调节组件的一部分位于调节空间内，并挤压胀紧组件使其发生形变，以锁紧安装段与支撑组件；并且，调节组件被设置为能够调整胀紧组件在安装孔的圆周方向上不同位置处的受挤压程度，以调节支撑组件的水平度和/或中线角度。本申请可快速实现对支撑组件的水平调节，从而降低拆装维护的成本。