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(54) **Title:** DOOR OPENING APPARATUS, TRANSMISSION CHAMBER AND SEMICONDUCTOR PROCESSING DEVICE

(54) 发明名称: 开门装置、传输腔室和半导体处理设备

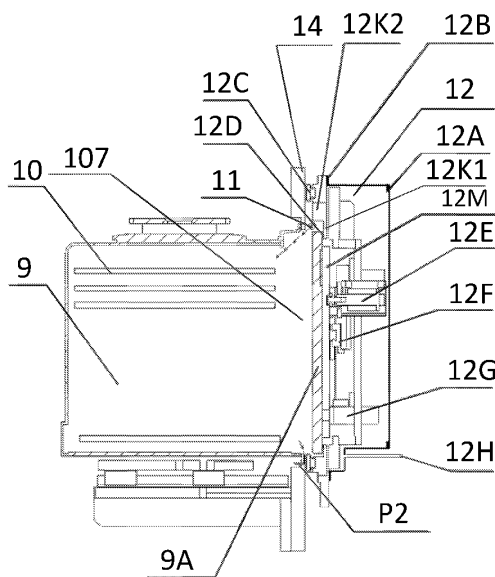


图 2

(57) **Abstract:** Provided in the present disclosure are a door opening apparatus, a transmission chamber and a semiconductor processing device; the door opening device is used for opening or closing a sealing door of a wafer cassette and comprises a housing component, which is used for movably docking to a chamber wall of a transmission chamber and which is located at a peripheral position of a transfer interface at which the chamber wall docks to a wafer transfer opening of a wafer cassette so as to open or close the transfer interface and wafer transfer opening of the wafer cassette, a first opening being provided at a side of the housing component that faces

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the wafer cassette; a docking assembly is disposed at the first opening, being used for docking a sealing door and separating the sealing door from the wafer cassette when the housing component is at a position in which the transfer interface and wafer transfer opening are closed, and the sealing door or the docking assembly sealingly cooperating with the first opening so as to form a sealed space within the housing component. The door opening apparatus provided by the present disclosure may ensure that contaminants produced by the described movable parts and lubricating oil thereon do not cause any contamination to a wafer at the interior of the wafer cassette, thereby being beneficial in improving product yield and performance.

(57) 摘要: 本公开提供了一种开门装置、传输腔室和半导体处理设备, 该开门装置用于开启或关闭晶圆盒的密封门, 包括壳体部件, 用于可移动的与传输腔室的腔室壁对接, 且位于腔室壁的和晶圆盒的传片口对接的传送接口的周边位置, 以开启或者封闭传送接口和晶圆盒的传片口, 且在壳体部件的朝向晶圆盒的一侧设有第一开口; 对接组件设置在第一开口处, 用于在壳体部件处于封闭传送接口和传片口的位置时, 对接密封门并使之与晶圆盒相分离, 并且密封门或对接组件与第一开口密封配合, 以使壳体部件的内部形成密封空间。本公开提供的开门装置, 可以确保这些运动部件和其上的润滑油产生的污染物不会对晶圆盒内部的晶圆造成任何污染, 进而有利于提高产品良率和性能。