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(54) Title: SEMICONDUCTOR PROCESS DEVICE

(54) 发明名称: 半导体工艺设备

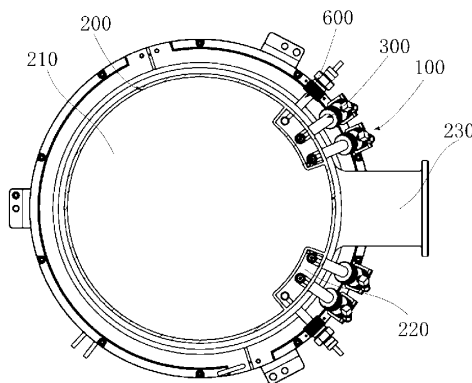


图 1

(57) Abstract: The present application relates to the field of semiconductor equipment, and disclosed thereby is a semiconductor process device. The semiconductor process device comprises a process pipe, a plurality of air intake pipes, and a plurality of groups of electrode assemblies. A process cavity and a plurality of buffer cavities are formed in the process pipe. The plurality of air intake pipes correspondingly extend into the plurality of buffer cavities. A sidewall of the process pipe is provided with an exhaust port that is in communication with the process cavity. Each buffer cavity is at least arranged corresponding to one group of electrode assemblies. Furthermore, the electrode assemblies extend into the buffer cavity and are connected to a radio frequency power supply. The electrode assemblies comprise a deformable electrode core, a plurality of electrode tubes, and an electrode network. The plurality of electrode tubes are sequentially arranged in the direction of extension of the electrode core, and two adjacent electrode tubes have a preset gap therebetween. The electrode core is penetratingly arranged in the plurality of electrode tubes and is respectively connected to the plurality of electrode tubes. The electrode network is arranged in the direction of extension of the electrode core and is sleeved on the outer sides

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GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW。

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— 包括国际检索报告(条约第21条(3))。

of the plurality of electrode tubes. The present application can solve problems such as high electrode costs and short service life.

(57) 摘要: 本申请公开了一种半导体工艺设备, 涉及半导体装备领域。一种半导体工艺设备: 包括工艺管、多个进气管和多组电极组件, 工艺管内形成有工艺腔和多个缓冲腔, 多个进气管对应延伸至多个缓冲腔中, 工艺管侧壁设有与工艺腔连通的排气口, 每个缓冲腔至少与一组电极组件对应设置, 且电极组件延伸至缓冲腔内, 并与射频电源连接; 电极组件包括可变形的电极芯、多个电极管和电极网, 多个电极管沿电极芯的延伸方向依次设置, 且相邻两个电极管之间具有预设间隙, 电极芯穿设于多个电极管内, 并与多个电极管分别连接; 电极网沿电极芯的延伸方向设置, 并套设于多个电极管的外侧。本申请能够解决电极成本高、使用寿命短等问题。