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(81) 指定国(除另有指明, 要求每一种可提供的国家保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG,

(54) Title: ELECTROPLATING DEVICE AND ELECTROPLATING METHOD FOR NON-CIRCULAR SUBSTRATE

(54) 发明名称: 非圆形基板的电镀装置及电镀方法

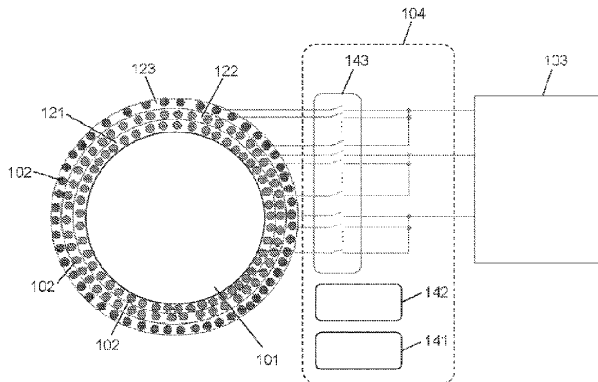


图 1a

(57) Abstract: Disclosed is an electroplating device for a non-circular substrate, comprising a central electrode region, a peripheral electrode region, a power supply device, and a control device. The size of the central electrode region is an inscribed circle of the non-circular substrate, and a central electrode is disposed in the central electrode region. The peripheral electrode region surrounds the central electrode region, the peripheral size of the peripheral electrode region is a circumscribed circle of the non-circular substrate, closely arranged point electrodes are disposed in the peripheral electrode region, and the point electrodes fill the peripheral electrode region. The power supply device supplies power for the central electrode and the point electrodes. The control device is connected between the power supply device and the central electrode as well as the point electrodes to control the on and off of the central electrode and the point electrodes, and the control device tracks the rotation position of the substrate, so that in the central electrode region and the peripheral electrode region, the electrodes in the region covered by the substrate are turned on and the electrodes in the region not covered by the substrate are turned off, and the electrodes are turned on or off as the substrate rotates. Also disclosed is an electroplating method for a non-circular substrate.

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本国际公布:

— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 本发明揭示了非圆形基板的电镀装置, 包括中心电极区、周边电极区、电源装置和控制装置。中心电极区的尺寸是非圆形基板的内切圆, 中心电极区中设置中心电极。周边电极区围绕中心电极区, 周边电极区的外周尺寸是非圆形基板的外切圆, 周边电极区中设置紧密排列的点状电极, 点状电极填充周边电极区。电源装置为中心电极以及点状电极供电。控制装置连接在电源装置和中心电极以及点状电极之间, 控制中心电极以及点状电极的开闭, 控制装置跟踪基板的转动位置, 使得中心电极区和周边电极区中由基板所覆盖的区域中的电极开启, 未被基板所覆盖的区域中的电极关闭, 电极跟随基板的转动而开启或关闭。本发明还揭示了非圆形基板的电镀方法。