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- (71) 申请人: 盛美半导体设备(上海)股份有限公司 (ACM RESEARCH (SHANGHAI), INC.) [CN/CN];
中国上海市浦东新区中国(上海)自由贸易试验区蔡伦路 1690 号第 4 幢, Shanghai 201203 (CN)。

- (72) 发明人: 陈志再 (CHEN, Zhizai); 中国上海市浦东新区中国(上海)自由贸易试验区蔡伦路 1690 号第 4 幢, Shanghai 201203 (CN)。陆陈华 (LU, Chenhua); 中国上海市浦东新区中国(上海)自由贸易试验区蔡伦路 1690 号第 4 幢, Shanghai 201203 (CN)。贾照伟 (JIA, Zhaowei); 中国上海市浦东新区中国(上海)自由贸易试验区蔡伦路 1690 号第 4 幢, Shanghai 201203 (CN)。王坚 (WANG, Jian); 中国上海市浦东新区中国(上海)自由贸易试验区蔡伦路 1690 号第 4 幢, Shanghai 201203 (CN)。王晖 (WANG, Hui); 中国上海市浦东新区中国(上海)自由贸易试验区蔡伦路 1690 号第 4 幢, Shanghai 201203 (CN)。
- (74) 代理人: 上海专利商标事务所有限公司 (SHANGHAI PATENT & TRADEMARK LAW

(54) Title: ELECTROPLATING DEVICE HAVING FUNCTION OF MONITORING THE STATUS OF IONIC MEMBRANE IN ELECTROPLATING CHAMBER AND MONITORING METHOD

(54) 发明名称: 具有监测电镀腔内离子膜状态功能的电镀装置及监测方法

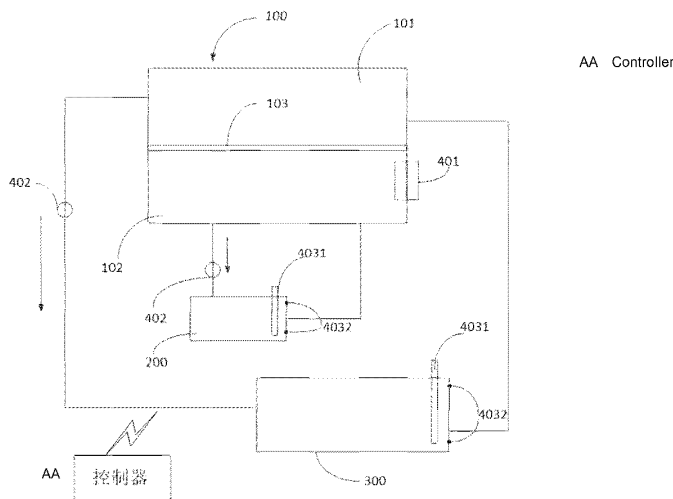


图 4

(57) Abstract: An electroplating device having a function of monitoring the status of an ionic membrane in an electroplating chamber and a monitoring method. The electroplating device comprises: an electroplating chamber, the interior thereof being provided with an ionic membrane, and the ionic membrane partitioning the electroplating chamber into a cathode chamber and an anode chamber; an anode tank, configured to contain an anode plating solution and connected to the anode chamber via a pipe, so as to circulate the anode

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OFFICE, LLC); 中国上海市徐汇区桂平路
435号, Shanghai 200233 (CN)。

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plating solution between the anode chamber and the anode tank; a cathode tank, configured to contain a cathode plating solution and connected to the cathode chamber via a pipe, so as to circulate the cathode plating solution between the cathode chamber and the cathode tank; and a monitoring mechanism, configured to monitor at least one piece of event information of the electroplating device, the event information being used for determining the status of the ionic membrane. The electroplating device uses the monitoring mechanism to monitor in real time various pieces of event information of the electroplating device, so as to monitor in real time whether the ionic membrane is in a normal operating status, thus preventing cross contamination between cathode plating solutions and anode plating solutions, and ensuring the quality of platings.

(57) 摘要: 一种具有监测电镀腔内离子膜状态功能的电镀装置及监测方法, 电镀装置包括: 电镀腔, 内部设置有离子膜, 离子膜将电镀腔分为阴极腔和阳极腔; 阳极槽, 配置为容纳阳极电镀液, 并通过管路与阳极腔连接, 以使阳极电镀液在阳极腔与阳极槽之间循环; 阴极槽, 配置为容纳阴极电镀液, 并通过管路与阴极腔连接, 以使阴极电镀液在阴极腔与阴极槽之间循环; 监测机构, 被配置为监测电镀装置的至少一事件信息, 事件信息用于确定离子膜的状态。该电镀装置通过设置监测机构实时监测电镀装置的各项事件信息达到实时监控离子膜的状态是否处于正常工作状态, 从而防止阴极电镀液和阳极电镀液交叉污染, 保障镀层质量。