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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, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ,

(54) Title: HEATING CHAMBER AND REACTION CHAMBER

(54) 发明名称: 发热室及反应腔室

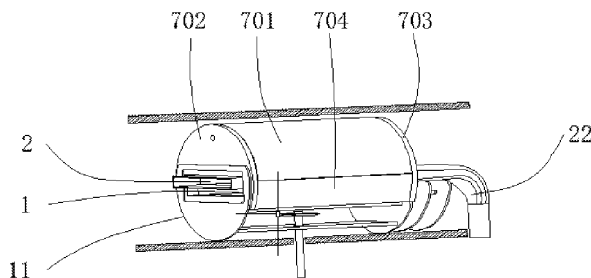


图 1

(57) Abstract: Disclosed in the present disclosure are a heating chamber and a reaction chamber. The heating chamber is internally provided with: a substrate transfer channel used for transferring a substrate and having a substrate pick-and-place position formed for picking and placing the substrate; and a gas delivery growth chamber arranged side by side with the substrate transfer channel and having an epitaxial growth position formed for epitaxial growth of the substrate, wherein a transfer inlet/outlet of the substrate transfer channel and a gas inlet of the gas delivery growth chamber are located on a same side of the heating chamber. As described above, when a transfer device carries a substrate carrier and goes into and out of the substrate transfer channel, the transfer device passes through only an upstream space of the reaction chamber and does not pass through a downstream space of the reaction chamber where dusty by-products are generated, so that the problem of defects on a surface of the substrate caused by particles in the downstream space can be greatly mitigated. Moreover, the maintenance of the heating chamber is simpler, and during the cleaning of the heating chamber and the downstream space, maintenance can be performed without removing the transfer device.

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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: 本公开公开了一种发热室及反应腔室, 该发热室内形成有: 基材传输通道, 用于传输基材, 且形成有用于取放基材的基材取放位; 气体传输生长腔, 与基材传输通道并列排布, 且形成有用于基材进行外延生长的外延生长位; 其中, 基材传输通道的传输进出口与气体传输生长腔的进气口位于发热室的同一侧。如上, 当传输装置承载基材载台在基材传输通道内进出时, 传输装置仅途经过反应腔室的上游空间, 而不再经过生成粉尘状副产物的反应腔室的下游空间, 可以极大程度降低因下游空间的颗粒物造成的基材表面的缺陷问题; 同时维护发热室更加简单, 对发热室以及下游空间清理时, 不用分离传输装置即可维护。