

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局



(10) 国际公布号
WO 2023/185202 A1

(43) 国际公布日
2023 年 10 月 5 日 (05.10.2023)

(51) 国际专利分类号:

B24B 7/22 (2006.01) *B65G 47/52* (2006.01)
B24B 41/06 (2012.01) *H01L 21/677* (2006.01)

(21) 国际申请号: PCT/CN2023/071166

(22) 国际申请日: 2023 年 1 月 9 日 (09.01.2023)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:

202210316152.7 2022 年 3 月 29 日 (29.03.2022) CN

(71) 申请人: 杭州众硅电子科技有限公司(HANGZHOU SIZONE ELECTRONIC TECHNOLOGY INC.) [CN/CN]; 中国浙江省杭州临安区青山湖街道创业街 88 号 1 幢一层吴雨, Zhejiang 311300 (CN)。

(72) 发明人: 徐 泉 宇 (XU, Xiaoyu); 中国浙江省杭州临安区青山湖街道创业街 88 号 1 幢一层吴雨, Zhejiang 311300 (CN)。 郑 东 州 (ZHENG,

Dongzhou); 中国浙江省杭州临安区青山湖街道创业街 88 号 1 幢一层吴雨, Zhejiang 311300 (CN)。

(74) 代理人: 杭州凯知专利代理事务所 (普通合伙) (HANGZHOU KAIZHI PATENT AGENCY (GENERAL PARTNERSHIP)); 中国浙江省杭州余杭区南苑街道迎宾同济中心 1 幢 403-4 室邵志, Zhejiang 311199 (CN)。

(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, 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, 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。

(54) Title: WAFER POLISHING SYSTEM, AND LOADING METHOD AND USE METHOD THEREFOR

(54) 发明名称: 一种晶圆抛光系统、装载方法及其使用方法

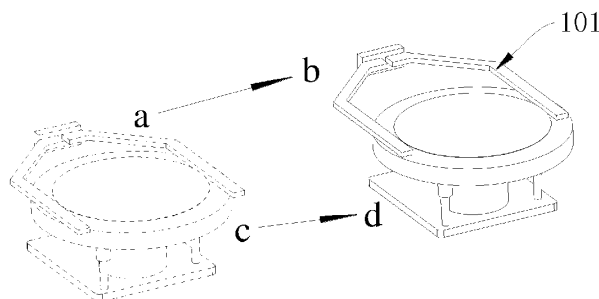


图 1

(57) Abstract: Disclosed in the present invention is a wafer polishing system, comprising: a wafer transfer apparatus that comprises a fixing base and a carrying table, the fixing base being capable of driving the carrying table to move in a wafer transmission channel along an X-axis direction; and a polishing module that is disposed at a side edge of the wafer transmission channel and is capable of obtaining a wafer from the carrying table for polishing. A connecting mechanism is provided between the fixing base and the carrying table, the connecting mechanism has a portion connected to the fixing base and a portion connected to the carrying table; when the two portions of the connecting mechanism are in connection, the carrying table and the fixing base are position-limited, and the connecting mechanism can move in the plane where the X axis and a Y axis are located, so as to drive the carrying table to move to a target position. Also disclosed in the present invention is a loading method for the wafer polishing system. Further disclosed in the present invention is a use method for the wafer polishing system. According to the present invention, the movement of the carrying table to the target position is effectively ensured, superposition adjustment is performed in two dimensions, and the connection range is wide; connection and position limiting can be performed in different processes, and the application is flexible.

[见续页]

WO 2023/185202 A1

(84) 指定国 (除另有指明, 要求每一种可提供的地区保护): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), 欧亚 (AM, AZ, BY, KG, KZ, RU, TJ, TM), 欧洲 (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG)。

本国际公布:

— 包括国际检索报告 (条约第21条(3))。

(57) 摘要: 本发明公开了一种晶圆抛光系统, 包括晶圆传递装置, 包括固定座和载片台, 固定座可带着载片台在晶圆传输通道内沿X轴方向移动; 抛光模组, 设于晶圆传输通道的侧边, 可于载片台上获取晶圆进行抛光; 固定座和载片台之间设有对接机构, 该对接机构的部分与固定座相连, 部分与载片台相连; 当对接机构的两部分完成对接时, 载片台和固定座实现限位, 且该对接机构可在X轴和Y轴所在平面移动, 以带动载片台移动至目标位置。本发明还公开了一种所述晶圆抛光系统的装载方法。本发明又公开了一种所述晶圆抛光系统的使用方法。本发明有效保证载片台移动至目标位置, 在两个维度上叠加调整, 对接范围广; 对接限位可以在不同过程中进行, 应用灵活。