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(54) Title: OPTICAL INTEGRATED DEVICE AND PREPARATION METHOD THEREFOR

(54) 发明名称: 光集成器件及其制备方法

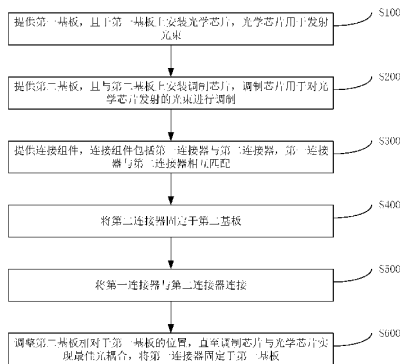


图 1

S100 Provide a first substrate, and mount an optical chip on the first substrate, the optical chip being used to emit a light beam

S200 Provide a second substrate, and mount a modulation chip on the second substrate, the modulation chip being used to modulate the light beam emitted by the optical chip

S300 Provide a connection assembly, the connection assembly comprising a first connector and a second connector, and the first connector and the second connector matching each other

S400 Fix the second connector to the second substrate

S500 Connect the first connector to the second connector

S600 Adjust the position of the second substrate relative to the first substrate until the modulation chip and the optical chip achieve optimal optical coupling, and fix the first connector to the first substrate

(57) Abstract: An optical integrated device and a preparation method therefor. The preparation method for the optical integrated device comprises: providing a first substrate (100), and mounting an optical chip (200) on the first substrate (100), the optical chip (200) being used to emit a light beam; providing a second substrate (300), and mounting a modulation chip (400) on the second substrate (300), the modulation chip (400) being used to modulate the light beam emitted by the optical chip (200); providing a connection assembly (500), the connection assembly (500) comprising a first connector (510) and a second connector (520), and the first connector (510) and the second connector (520) matching each other; fixing the second connector (520) to the second substrate (300); connecting the first connector (510) to the second connector (520); adjusting the position of the second substrate (300) relative to the first substrate (100) until the modulation chip (400) and the optical chip (200) achieve optimal optical coupling, and fixing the first connector (510) to the first substrate (100). The present method may greatly reduce the difficulty of the preparation process of the optical integrated device, and improve the production yield of the optical integrated device.

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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)。

根据细则4.17的声明:

- 关于发明人身份(细则4.17(i))
- 关于申请人有权申请并被授予专利(细则4.17(ii))
- 发明人资格(细则4.17(iv))

本国际公布:

- 包括国际检索报告(条约第21条(3))。

(57) 摘要: 一种光集成器件及其制备方法。光集成器件的制备方法包括: 提供第一基板(100), 且于第一基板(100)上安装光学芯片(200), 光学芯片(200)用于发射光束; 提供第二基板(300), 且与第二基板(300)上安装调制芯片(400), 调制芯片(400)用于对光学芯片(200)发射的光束进行调制; 提供连接组件(500), 连接组件(500)包括第一连接器(510)与第二连接器(520), 第一连接器(510)与第二连接器(520)相互匹配; 将第二连接器(520)固定于第二基板(300); 将第一连接器(510)与第二连接器(520)连接; 调整第二基板(300)相对于第一基板(100)的位置, 直至调制芯片(400)与光学芯片(200)实现最佳光耦合, 将第一连接器(510)固定于第一基板(100)。本方法可以大大减低光集成器件的制备工艺难度, 并提高光集成器件的生产良率。