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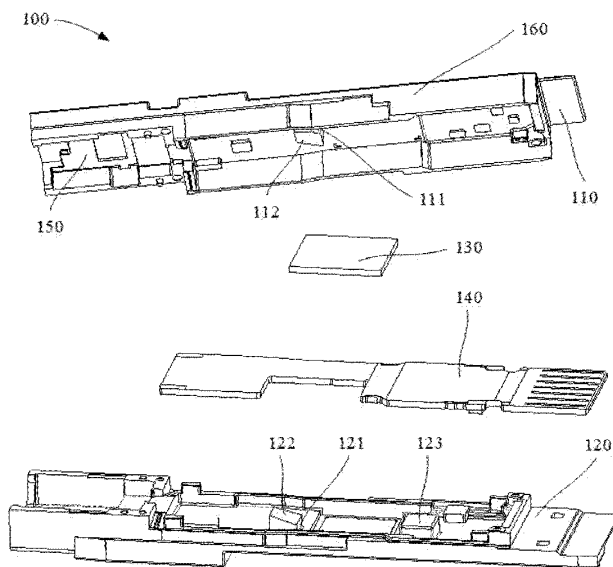
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- (81) 指定国(除另有指明, 要求每一种可提供的国家保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, 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,

(54) **Title:** OPTICAL MODULE AND OPTICAL COMMUNICATION DEVICE

(54) 发明名称: 光模块及光通信设备



[图1]

(57) **Abstract:** An optical module (100) and an optical communication device. The optical module (100) comprises a first housing (110), a second housing (120), an optoelectronic element (130) and a circuit board (140). The optoelectronic element (130) and the circuit board (140) are both mounted between the first housing (110) and the second housing (120). A bottom wall (150) on the side of the first housing (110) facing the second housing (120) is provided with a first protrusion (111), the first protrusion (111) being provided with a first matching surface (112); and a bottom wall (150) of the second housing (120) is provided with a second matching

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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))

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- 包括国际检索报告(条约第21条(3))。

surface (122), the first matching surface (112) being thermally connected to the second matching surface (122). Heat generated by the optoelectronic element (130) during operation can be conducted to the first housing (110) by means of the first protrusion (111), and heat concentrated on the second housing (120) can also be conducted to the first housing (110) by means of the first protrusion (111) and can be conducted to the outside by means of the bottom wall (150) of the first housing (110). Compared with a traditional air heat conduction method, the contact area between the first housing (110) and the second housing (120) is increased, such that the heat conduction rate is accelerated, and the heat concentrated on the second housing (120) can thus be quickly dissipated, thereby significantly improving the heat dissipation effect of the optical module (100).

(57) 摘要: 一种光模块(100)及光通信设备。光模块(100)包括第一壳体(110)、第二壳体(120)、光电元件(130)与电路板(140)。光电元件(130)、电路板(140)均安装于第一壳体(110)与第二壳体(120)之间。第一壳体(110)在朝向第二壳体(120)一侧的底壁(150)上具有第一凸起(111), 第一凸起(111)具有第一配合面(112); 第二壳体(120)的底壁(150)上具有第二配合面(122), 第一配合面(112)与第二配合面(122)导热连接。光电元件(130)在工作过程中产生的热量可通过第一凸起(111)传导至第一壳体(110), 且集中于第二壳体(120)上的热量也可通过第一凸起(111)传导至第一壳体(110), 并通过第一壳体(110)的底壁(150)传导至外界。相较于传统的空气导热方式, 增大了第一壳体(110)与第二壳体(120)之间的接触面积, 加快热量传导速率, 可快速散去集中于第二壳体(120)上的热量, 显著提高了光模块(100)的散热效果。