

(19) United States

(12) Patent Application Publication KUNG et al.

(10) Pub. No.: US 2024/0237187 A9

Jul. 11, 2024 (48) **Pub. Date:** CORRECTED PUBLICATION

(54) HEAT DISSIPATION DESIGN FOR OPTICAL TRANSCEIVER

(71) Applicant: Prime World International Holdings

Ltd., New Taipei City (TW)

Inventors: Ling-An KUNG, New Taipei City (TW); Yu CHEN, New Taipei City

> (TW); Che-Shou YEH, New Taipei City (TW)

- Appl. No.: 17/973,144
- Filed: Oct. 25, 2022

Prior Publication Data

- (15) Correction of US 2024/0138050 A1 Apr. 25, 2024 See (22) Filed.
- (65) US 2024/0138050 A1 Apr. 25, 2024

Publication Classification

(51) **Int. Cl.** (2006.01)H05K 1/02 H04B 10/40 (2006.01)H05K 7/20 (2006.01)

(52) U.S. Cl. CPC H05K 1/0203 (2013.01); H04B 10/40 (2013.01); **H05K** 7/2039 (2013.01)

(57)**ABSTRACT**

An optical transceiver includes a housing, circuit board, first heat source and heat conductive component. The housing includes first and second housing stacked on each other and together form accommodation space. The circuit board is disposed in the accommodation space. The circuit board has first and second surface. The first surface and the second surface face away from each other. The first surface faces the first housing. The second surface faces the second housing. The first heat source is disposed on the second surface of the circuit board and electrically connected to the circuit board. The heat conductive component is disposed on the first surface and thermally coupled to the first housing. Size of projection of the heat conductive component onto the second surface is larger than size of projection of the first heat source onto the second surface.

