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### (54) CIRCUIT BOARD STRUCTURE AND MANUFACTURING METHOD THEREOF

- (71) Applicant: Unimicron Technology Corp., Taoyuan City (TW)
- (72) Inventors: Kai-Ming Yang, Hsinchu County (TW);
  Chia-Yu Peng, Taoyuan City (TW);
  Cheng-Ta Ko, Taipei City (TW); Pu-Ju
  Lin, Hsinchu City (TW)
- (73) Assignee: **Unimicron Technology Corp.**, Taoyuan City (TW)
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### (57) ABSTRACT

A circuit board structure includes a carrier, a thin film redistribution layer disposed on the carrier, solder balls electrically connected to the thin film redistribution layer and the carrier, and a surface treatment layer. The thin film redistribution layer includes a first dielectric layer, pads, a first metal layer, a second dielectric layer, a second metal layer, and a third dielectric layer. A top surface of the first dielectric layer is higher than an upper surface of each pad. The first metal layer is disposed on a first surface of the first dielectric layer. The second dielectric layer has second openings exposing part of the first metal layer. The second metal layer extends into the second openings and is electrically connected to the first metal layer. The third dielectric layer has third openings exposing part of the second metal layer. The surface treatment layer is disposed on the upper surfaces.

