



US 20240237484A1

(19) **United States**

(12) **Patent Application Publication**
Gao et al.

(10) **Pub. No.: US 2024/0237484 A1**

(43) **Pub. Date: Jul. 11, 2024**

(54) **MOTHER BOARD FOR DISPLAY PANEL,
DISPLAY PANEL, AND DISPLAY DEVICE**

(52) **U.S. CL.**

CPC **H10K 59/873** (2023.02); **H10K 59/122**
(2023.02)

(71) Applicants: **HEFEI BOE JOINT TECHNOLOGY
CO., LTD.**, Hefei (CN); **BOE
TECHNOLOGY GROUP CO., LTD.**,
Beijing (CN)

(57)

ABSTRACT

(72) Inventors: **Xinwei Gao**, Beijing (CN); **Peng Li**,
Beijing (CN); **Shuai Zhang**, Beijing
(CN)

A mother board for a display panel, having a bonding region and a first panel region including a retaining region and a peripheral region, in which: a first light-emitting functional layer is located in the first panel region; a first adhesive layer surrounding the first panel region is adhered to a cover plate and a base substrate, and an orthographic projection of an edge of the first adhesive layer close to the bonding region on the base substrate defines a first pattern; the first light-emitting functional layer in the retaining region and the peripheral region are spaced by a first spacing layer, an orthographic projection of which on the base substrate partially overlaps with the first pattern and form a closed second pattern therewith. The orthographic projection of the first spacing layer on the base substrate is located within that of the first adhesive layer on the base substrate.

(21) Appl. No.: **17/997,027**

(22) PCT Filed: **Oct. 29, 2021**

(86) PCT No.: **PCT/CN2021/127263**

§ 371 (c)(1),

(2) Date: **May 4, 2023**

Publication Classification

(51) **Int. Cl.**

H10K 59/80 (2006.01)

H10K 59/122 (2006.01)

