

## (19) United States

# (12) Patent Application Publication (10) Pub. No.: US 2024/0180003 A1

#### May 30, 2024 (43) **Pub. Date:**

## (54) **DISPLAY PANEL**

(71) Applicant: Wuhan China Star Optoelectronics Semiconductor Display Technology Co., Ltd., Wuhan, Hubei (CN)

(72) Inventor: Manli LI, Wuhan, Hubei (CN)

(73) Assignee: Wuhan China Star Optoelectronics Semiconductor Display Technology Co., Ltd., Wuhan, Hubei (CN)

17/790,247 (21) Appl. No.:

(22) PCT Filed: Jun. 29, 2022

(86) PCT No.: PCT/CN2022/102245

§ 371 (c)(1),

(2) Date: Jun. 30, 2022

#### (30)Foreign Application Priority Data

(CN) ...... 202210669020.2 Jun. 14, 2022

### **Publication Classification**

(51) Int. Cl. H10K 59/80 (2006.01)H10K 59/40 (2006.01)H10K 77/10 (2006.01)H10K 102/00 (2006.01)

(52) U.S. Cl.

H10K 59/879 (2023.02); H10K 59/40 CPC ..... (2023.02); H10K 59/873 (2023.02); H10K 59/8791 (2023.02); H10K 77/111 (2023.02); H10K 2102/311 (2023.02); H10K 2102/351 (2023.02)

#### (57)**ABSTRACT**

The present disclosure provides a display panel, the display panel includes a substrate, a light-emitting layer, a first refractive layer, and a second refractive layer. The first refractive layer is arranged on a side of the light-emitting layer away from the substrate. The second refractive layer covers a side of the first refractive layer away from the substrate and fills a plurality of openings of the first refractive layer. The second refractive layer extends from a display area to a non-display area and covers a bending area to protect wirings in the bending area, and the second refractive layer may replace a protective glue layer in prior art, which is beneficial to saving processes.

