



US 20240215317A1

(19) **United States**(12) **Patent Application Publication**
YANG et al.(10) **Pub. No.: US 2024/0215317 A1**(43) **Pub. Date: Jun. 27, 2024**(54) **DISPLAY DEVICE, DISPLAY PANEL AND
METHOD FOR MANUFACTURING THE
DISPLAY PANEL****Publication Classification**(51) **Int. Cl.****H10K 59/122** (2006.01)**H10K 59/12** (2006.01)(52) **U.S. Cl.****CPC H10K 59/122 (2023.02); H10K 59/1201**
(2023.02)(71) Applicants: **BOE TECHNOLOGY GROUP CO.,
LTD.**, Beijing (CN); **YUNNAN
INVENSIGHT
OPTOELECTRONICS
TECHNOLOGY CO., LTD.**, Yunnan
(CN)(72) Inventors: **Shengji YANG**, Beijing (CN); **Xue
DONG**, Beijing (CN); **Hui WANG**,
Beijing (CN); **Xiaochuan CHEN**,
Beijing (CN); **Pengcheng LU**, Beijing
(CN); **Kuanta HUANG**, Beijing (CN);
Dacheng ZHANG, Beijing (CN)(21) Appl. No.: **17/915,525**(22) PCT Filed: **Aug. 19, 2021**(86) PCT No.: **PCT/CN2021/113638**

§ 371 (c)(1),

(2) Date: **Feb. 23, 2023**

(57)

ABSTRACT

A display device, a display panel and a method for manufacturing the display panel are provided. The display panel includes: a driving backplane including a substrate, at least one wiring layer and a planarization layer; a first electrode layer including first electrodes spaced apart from each other; a pixel definition layer exposing each of the first electrodes, the pixel definition layer being provided with at least one separation protrusion which protrudes along a direction away from the substrate, and an orthographic projection of the separation protrusion on the planarization layer being located outside the first electrodes; a conductive shielding layer insulated from the first electrodes; a light emitting layer covering the pixel definition layer and the first electrodes, the light emitting layer protruding at the at least one separation protrusion, and the light emitting layer being electrically connected to the conductive shielding layer; and a second electrode.

