

# (19) United States

# (12) Patent Application Publication (10) Pub. No.: US 2024/0244893 A1 Kil et al.

Jul. 18, 2024 (43) **Pub. Date:** 

### (54) **DISPLAY DEVICE**

(71) Applicant: LG Display Co., Ltd., Seoul (KR)

(72) Inventors: **Moonsung Kil**, Paju-si (KR); YongCheol Kim, Gimpo-si (KR); Mi-Na Kim, Paju-si (KR)

(21) Appl. No.: 18/522,699

Filed: Nov. 29, 2023 (22)

(30)Foreign Application Priority Data

Jan. 18, 2023 (KR) ...... 10-2023-0007392

### **Publication Classification**

(51) Int. Cl. H10K 59/122 (2006.01)H10K 59/35 (2006.01)H10K 59/80 (2006.01)

### (52) U.S. Cl.

CPC ....... H10K 59/122 (2023.02); H10K 59/351 (2023.02); H10K 59/353 (2023.02); H10K 59/80515 (2023.02); H10K 59/80518 (2023.02); H10K 59/873 (2023.02)

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

A display device according to an exemplary embodiment of the present disclosure includes a planarization layer disposed above a substrate, a first bank disposed on the planarization layer, an anode disposed on the planarization layer and on a side surface of the first bank, a second bank covering a portion of the anode and the first bank and disposed above the first bank and the anode, a doping layer disposed on a top surface and a side portion of the second bank, an organic layer which is disposed on the doping layer and the anode, a cathode disposed on the organic layer, and an encapsulating unit disposed above the cathode. By doing this, the reflectance is reduced and the damage of the light emitting diode is suppressed.

