



US 20240215305A1

(19) **United States**

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

(10) **Pub. No.: US 2024/0215305 A1**

(43) **Pub. Date: Jun. 27, 2024**

(54) **DISPLAY DEVICE AND METHOD OF
MANUFACTURING THE SAME**

H10K 71/20 (2006.01)

H10K 85/30 (2006.01)

(71) Applicant: **Samsung Display Co., LTD.**, Yongin-si
(KR)

(52) **U.S. Cl.**

CPC **H10K 59/1201** (2023.02); **H10K 59/121**
(2023.02); **H10K 59/122** (2023.02); **H10K**
59/873 (2023.02); **H10K 71/231** (2023.02);
H10K 85/371 (2023.02); **H10K 2102/302**
(2023.02)

(72) Inventors: **Hyun Eok SHIN**, Yongin-si (KR);
Joon Yong PARK, Yongin-si (KR)

(21) Appl. No.: **18/375,670**

(57)

ABSTRACT

A display device includes a first pixel electrode in a first emission area, an insulating layer covering an edge of the first pixel electrode, a first light-emitting layer on the first pixel electrode and the insulating layer, a first common electrode on the first light-emitting layer, a bank disposed on the insulating layer and surrounding the first emission area, and a first organic pattern surrounding the first emission area on the bank and including the same material as that of the first light-emitting layer. The bank includes a first bank contacting the first common electrode, a second bank disposed on the first bank and including a tip structure protruding toward the first emission area, and a third bank disposed on the second bank and having low reflection characteristics.

(22) Filed: **Oct. 2, 2023**

(30) **Foreign Application Priority Data**

Dec. 23, 2022 (KR) 10-2022-0183416

Apr. 17, 2023 (KR) 10-2023-0050149

Publication Classification

(51) **Int. Cl.**

H10K 59/12 (2006.01)

H10K 59/121 (2006.01)

H10K 59/122 (2006.01)

H10K 59/80 (2006.01)

