



US 20240244905A1

(19) **United States**

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

(10) **Pub. No.: US 2024/0244905 A1**

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

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

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

CPC *H10K 59/131* (2023.02); *H10K 59/1201*
(2023.02); *H10K 2102/341* (2023.02)

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

(57)

ABSTRACT

(72) Inventors: **Jae Hak LEE**, Yongin-si (KR); **Si Joon
SONG**, Yongin-si (KR)

A display device includes a first substrate; a thin film transistor disposed on an upper surface of the first substrate; a plurality of pad electrodes disposed under a lower surface of the first substrate; a second substrate disposed under the lower surface of the first substrate and defining an opening therein exposing the plurality of pad electrodes; a circuit board attached onto the plurality of pad electrodes exposed through the opening of the second substrate; and a plurality of conductive ink patterns surrounding at least a side surface of the circuit board and being in contact with at least one of the plurality of pad electrodes, where lower surfaces of the plurality of conductive ink patterns each have a shape having a concave central portion.

(21) Appl. No.: **18/396,676**

(22) Filed: **Dec. 26, 2023**

(30) **Foreign Application Priority Data**

Jan. 18, 2023 (KR) 10-2023-0007529

Publication Classification

(51) **Int. Cl.**

H10K 59/131 (2006.01)

H10K 59/12 (2006.01)

