

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0179993 A1 JEONG et al.

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

(54) TRANSPARENT DISPLAY DEVICE

(71) Applicant: LG DISPLAY CO., LTD., Seoul (KR)

(72) Inventors: **Da-Woon JEONG**, Paju-si (KR); Su-Yeon LEE, Paju-si (KR); Sung-Hee KIM, Paju-si (KR); Jae-Bin SONG, Paju-si (KR); Sung-Hee PARK, Paju-si

(KR)

(73) Assignee: LG DISPLAY CO., LTD., Seoul (KR)

(21) Appl. No.: 18/436,068

(22) Filed: Feb. 8, 2024

Related U.S. Application Data

Continuation of application No. 17/338,444, filed on Jun. 3, 2021, now Pat. No. 11,963,423.

(30)Foreign Application Priority Data

(KR) 10-2020-0078343

Publication Classification

(51) Int. Cl. H10K 59/38

(2006.01)H10K 59/121 (2006.01)

(52)U.S. Cl.

CPC H10K 59/38 (2023.02); H10K 59/121

(2023.02)

(57)ABSTRACT

A transparent display device comprises: a first substrate including a display area and first to fourth bezel areas surrounding the display area, wherein the display area includes a plurality of pixel regions each including an emitting portion and a transparent portion; a second substrate facing the first substrate; a transparent dam between the first and second substrates and in the first to fourth bezel areas; a first pad electrode on the first substrate and in the first bezel area; and a first color filter pattern on the second substrate and in the first bezel area.

