

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2023/0232701 A1 KIM et al.

Jul. 20, 2023 (43) **Pub. Date:**

(54) DISPLAY APPARATUS

(71) Applicant: SAMSUNG DISPLAY CO., LTD.,

YONGIN-SI (KR)

Inventors: SUNKWANG KIM, YONGIN-SI

(KR); KINYENG KANG, YONGIN-SI

(KR)

Appl. No.: 18/190,811

(22)Filed: Mar. 27, 2023

Related U.S. Application Data

(63) Continuation of application No. 16/182,119, filed on Nov. 6, 2018, now Pat. No. 11,637,252, which is a continuation of application No. 15/294,452, filed on Oct. 14, 2016, now Pat. No. 10,135,010.

(30)Foreign Application Priority Data

Oct. 16, 2015 (KR) 10-2015-0144991

Publication Classification

(51) Int. Cl. H10K 77/10 (2006.01)H10K 50/842 (2006.01)

H10K 50/844 (2006.01)H10K 59/12 (2006.01)H10K 59/124 (2006.01)H10K 71/20 (2006.01)

(52) U.S. Cl.

CPC H10K 77/10 (2023.02); H10K 50/8426 (2023.02); H10K 50/8445 (2023.02); H10K 59/12 (2023.02); H10K 59/124 (2023.02); H10K 71/231 (2023.02); H01L 27/1237 (2013.01)

(57)ABSTRACT

A display apparatus includes a substrate including at least one hole disposed in a hole area of the substrate, a thin film transistor disposed on the substrate, a light-emitting component disposed on the substrate and electrically connected to the thin film transistor, an insulating layer disposed on the substrate, a thin film encapsulation layer disposed on the substrate, and a laser blocking layer. The substrate includes a display area and a non-display area that is disposed between the display area and the hole area. The laser blocking layer is disposed on the insulating layer in the non-display area.

