

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2023/0232655 A1

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

(54) DISPLAY DEVICE AND METHOD OF MANUFACTURING DISPLAY DEVICE

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

YONGIN-SI (KR)

(72) Inventors: **JEONGSEOK** LEE, Yongin-si (KR);

HYEKYUN LEE, Seoul (KR); SEUNGHUN KIM, Hwaseong-si (KR); WOOCHEOL PARK, Asan-si (KR); KWANHYUCK YOON, Hwaseong-si

(KR)

- (21) Appl. No.: 18/061,019
- Filed: Dec. 2, 2022 (22)
- (30)Foreign Application Priority Data

Jan. 18, 2022 (KR) 10-2022-0007117

Publication Classification

(51) Int. Cl. H01L 51/00

(2006.01)

U.S. Cl. (52)

CPC H01L 51/5265 (2013.01); H01L 51/5253

(2013.01); **H01L 51/56** (2013.01)

(57)**ABSTRACT**

A display device includes a display element layer including a first electrode layer, a light-emitting layer disposed on the first electrode layer, and a second electrode layer disposed on the light-emitting layer, a capping layer disposed on the second electrode layer, a protective layer disposed on the capping layer and covering a portion of the second electrode layer exposed by the capping layer, an optical compensation layer disposed on the protective layer, and an encapsulation layer disposed on the optical compensation layer. The refractive index of the optical compensation layer is lower than that of the protective layer.

