

# (19) United States

## (12) Patent Application Publication (10) Pub. No.: US 2023/0231074 A1 LEE et al.

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

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

- (71) Applicant: Samsung Display Co., LTD., Yongin-si
- (72) Inventors: Won Ho LEE, Yongin-si (KR); Jong Hyuk KANG, Yongin-si (KR); Buem Joon KIM, Yongin-si (KR); Soo Jo OCK, Yongin-si (KR); Hyun Deok IM, Yongin-si (KR)
- (21) Appl. No.: 17/890,981
- (22) Filed: Aug. 18, 2022
- (30)Foreign Application Priority Data

Jan. 14, 2022 (KR) ...... 10-2022-0006077

### **Publication Classification**

(51) Int. Cl. H01L 33/10 (2006.01)H01L 33/38 (2006.01)H01L 33/46 (2006.01)(2006.01)H01L 33/00

(52) U.S. Cl. CPC ...... H01L 33/10 (2013.01); H01L 33/382 (2013.01); H01L 33/46 (2013.01); H01L 33/005 (2013.01); H01L 2933/0016 (2013.01); H01L 2933/0025 (2013.01)

#### (57)ABSTRACT

A display device may include including a first insulating reflective layer including a distributed Bragg reflector above a substrate, a first electrode and a second electrode above the first insulating reflective layer, a second insulating reflective layer including a distributed Bragg reflector above the first electrode and the second electrode, and a light emitting element above the second insulating reflective layer.

