

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0251604 A1

Jul. 25, 2024 (43) Pub. Date:

(54) **DISPLAY DEVICE**

Applicant: Samsung Display Co., Ltd., Yongin-si

Inventors: **SEON UK LEE**, Yongin-si (KR);

GYEONGEUN EOH, Yongin-si (KR); KWANG-MIN LEE, Yongin-si (KR)

Assignee: Samsung Display Co., Ltd., Yongin-si

(KR)

Appl. No.: 18/503,269

(22)Filed: Nov. 7, 2023

(30)Foreign Application Priority Data

Jan. 25, 2023 (KR) 10-2023-0009294

Publication Classification

(51) Int. Cl.

H10K 59/122 (2006.01)

H10K 59/12 (2006.01) H10K 59/38 (2006.01)(2006.01)H10K 71/13

U.S. Cl. (52)

> CPC H10K 59/122 (2023.02); H10K 59/1201 (2023.02); H10K 59/38 (2023.02); H10K

71/135 (2023.02)

(57)ABSTRACT

A display device may include a display panel, a first light conversion layer, a second light conversion layer, and a light transmission layer that are disposed on the display panel and spaced apart from each other, a support layer that is disposed between the first light conversion layer and the second light conversion layer; and a bank layer that is disposed on the display panel to define openings in which the first and second light conversion layers are disposed, and is disposed on the support layer and between the first and second light conversion layers. The support layer and the light transmission layer may include a same material.

