



US 20240251578A1

(19) **United States**(12) **Patent Application Publication**
KIM et al.(10) **Pub. No.: US 2024/0251578 A1**(43) **Pub. Date: Jul. 25, 2024**(54) **COMPOUND FOR ORGANIC
OPTOELECTRONIC DEVICE,
COMPOSITION FOR ORGANIC
OPTOELECTRONIC DEVICE, ORGANIC
OPTOELECTRONIC DEVICE, AND DISPLAY
DEVICE**(86) PCT No.: **PCT/KR2022/019557**

§ 371 (c)(1),

(2) Date: **Oct. 26, 2023**(30) **Foreign Application Priority Data**

Dec. 16, 2021 (KR) 10-2021-0180991

(71) Applicant: **SAMSUNG SDI CO., LTD.**, Yongin-si,
Gyeonggi-do (KR)**Publication Classification**(72) Inventors: **Byungku KIM**, Suwon-si, Gyeonggi-do
(KR); **Yunsoo KIM**, Suwon-si,
Gyeonggi-do (KR); **Sunwoong SHIN**,
Suwon-si, Gyeonggi-do (KR);
Byoungkwan LEE, Suwon-si,
Gyeonggi-do (KR); **Kipo JANG**,
Suwon-si, Gyeonggi-do (KR);
Sung-Hyun JUNG, Suwon-si,
Gyeonggi-do (KR); **Jongwoo CHOI**,
Suwon-si, Gyeonggi-do (KR);
Hyunjung KIM, Suwon-si,
Gyeonggi-do (KR); **Mijin LEE**,
Suwon-si, Gyeonggi-do (KR)(51) **Int. Cl.****H10K 50/11** (2006.01)**H10K 85/30** (2006.01)**H10K 85/60** (2006.01)(52) **U.S. Cl.**CPC **H10K 50/11** (2023.02); **H10K 85/346**
(2023.02); **H10K 85/633** (2023.02); **H10K**
85/654 (2023.02); **H10K 85/6572** (2023.02);
H10K 85/6574 (2023.02); **H10K 85/6576**
(2023.02)

(57)

ABSTRACTProvided are a compound for an organic optoelectronic
device represented by Chemical Formula 1, a composition
for an organic optoelectronic device including the same, an
organic optoelectronic device, and a display device.The contents of Chemical Formula I are as defined in the
specification.(21) Appl. No.: **18/288,439**(22) PCT Filed: **Dec. 5, 2022**