



US 20240251582A1

(19) **United States**

(12) **Patent Application Publication**

Lee et al.

(10) **Pub. No.: US 2024/0251582 A1**

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

(54) **ORGANOMETALLIC COMPOUND,  
LIGHT-EMITTING DEVICE INCLUDING  
THE ORGANOMETALLIC COMPOUND,  
AND ELECTRONIC APPARATUS  
INCLUDING THE LIGHT-EMITTING  
DEVICE**

(71) Applicant: **Samsung Display Co., Ltd.**, Yongin-si  
(KR)

(72) Inventors: **Eunyoung Lee**, Yongin-si (KR); **Iljoon  
Kang**, Yongin-si (KR); **Sungbum Kim**,  
Yongin-si (KR); **Eunsoo Ahn**, Yongin-si  
(KR); **Jaesung Lee**, Yongin-si (KR);  
**Junghoon Han**, Yongin-si (KR)

(73) Assignee: **Samsung Display Co., Ltd.**, Yongin-si  
(KR)

(21) Appl. No.: **18/472,518**

(22) Filed: **Sep. 22, 2023**

(30) **Foreign Application Priority Data**

Jan. 10, 2023 (KR) ..... 10-2023-0003602

**Publication Classification**

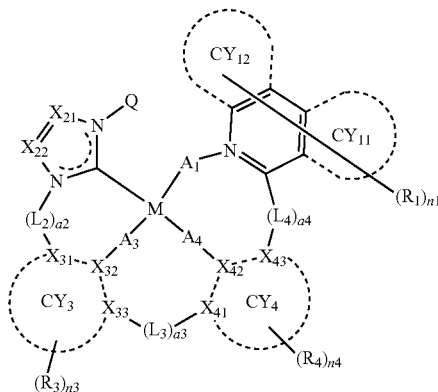
(51) **Int. Cl.**  
**H10K 50/12** (2006.01)  
**C07F 15/00** (2006.01)  
**C09K 11/06** (2006.01)  
**H10K 50/15** (2006.01)  
**H10K 50/16** (2006.01)  
**H10K 85/30** (2006.01)

(52) **U.S. Cl.**  
CPC ..... **H10K 50/12** (2023.02); **C07F 15/0086**  
(2013.01); **C09K 11/06** (2013.01); **H10K 50/15**  
(2023.02); **H10K 50/16** (2023.02); **H10K**  
**85/346** (2023.02)

(57) **ABSTRACT**

Embodiments provide an organometallic compound, a light-emitting device including the organometallic compound, and an electronic apparatus including the light-emitting device. The light-emitting device includes a first electrode, a second electrode facing the first electrode, an organic layer between the first electrode and the second electrode and comprising an emission layer, and at least one organometallic compound, which is represented by Formula 1, wherein Formula 1 is explained in the specification:

[Formula 1]



**10**

