



US 20240180032A1

(19) **United States**

(12) **Patent Application Publication**  
**KANG et al.**

(10) **Pub. No.: US 2024/0180032 A1**

(43) **Pub. Date: May 30, 2024**

(54) **ORGANIC ELECTRONIC ELEMENT,  
ORGANIC ELECTRONIC ELEMENT USING  
THE SAME, AND AN ELECTRONIC DEVICE  
THEREOF**

(30) **Foreign Application Priority Data**

Oct. 26, 2020 (KR) ..... 10-2020-0139441

(71) Applicant: **DUK SAN NEOLUX CO., LTD.**,  
Cheonan-si (KR)

**Publication Classification**

(51) **Int. Cl.**

**H10K 85/60** (2006.01)

**C07D 251/24** (2006.01)

**C09K 11/06** (2006.01)

(52) **U.S. Cl.**

CPC ..... **H10K 85/6574** (2023.02); **C07D 251/24**  
(2013.01); **C09K 11/06** (2013.01); **H10K**  
**85/626** (2023.02); **H10K 85/631** (2023.02);  
**H10K 85/653** (2023.02); **H10K 85/654**  
(2023.02); **H10K 85/6572** (2023.02); **H10K**  
**85/6576** (2023.02); **C07B 2200/05** (2013.01);  
**C09K 2211/1018** (2013.01); **H10K 50/11**  
(2023.02)

(72) Inventors: **Eun Jin KANG**, Cheonan-si (KR);  
**Hyun Ju SONG**, Cheonan-si (KR);  
**Junggeun LEE**, Cheonan-si (KR)

(73) Assignee: **DUK SAN NEOLUX CO., LTD.**,  
Cheonan-si (KR)

(21) Appl. No.: **18/413,481**

(22) Filed: **Jan. 16, 2024**

**Related U.S. Application Data**

(63) Continuation-in-part of application No. 18/180,625,  
filed on Mar. 8, 2023, which is a continuation-in-part  
of application No. 17/212,886, filed on Mar. 25, 2021,  
now Pat. No. 11,678,577, which is a continuation of  
application No. 17/096,790, filed on Nov. 12, 2020,  
now Pat. No. 11,063,226.

(57)

**ABSTRACT**

Provided are a compound that can improve the luminous  
efficiency, stability, and lifespan of the element, an organic  
electronic element using the same, and an electronic device  
thereof.

100

