

US 20240237390A9

(19) United States

(12) Patent Application Publication JIA et al.

(10) Pub. No.: US 2024/0237390 A9

(48) **Pub. Date: Jul. 11, 2024 CORRECTED PUBLICATION**

(54) ORGANIC LIGHT-EMITTING DIODE, METHOD OF MANUFACTURING THE SAME AND ORGANIC LIGHT-EMITTING DIODE DISPLAY APPARATUS

- (71) Applicant: **BOE TECHNOLOGY GROUP CO., LTD.**, Beijing (CN)
- (72) Inventors: Congcong JIA, Beijing (CN); Lei CHEN, Beijing (CN); Kun MA, Beijing (CN)
- (21) Appl. No.: 17/768,265
- (22) PCT Filed: May 21, 2021
- (86) PCT No.: **PCT/CN2021/095150**

§ 371 (c)(1),

(2) Date: Apr. 12, 2022

Prior Publication Data

- (15) Correction of US 2024/0138180 A1 Apr. 25, 2024See (22) PCT FiledSee (86) PCT No.See (30) Foreign Application Data
- (65) US 2024/0138180 A1 Apr. 25, 2024
- (30) Foreign Application Priority Data

Jun. 10, 2020 (CN) 202010524270.8

Publication Classification

(51)	Int. Cl.	
. ,	H10K 50/18	(2006.01)
	C09K 11/02	(2006.01)
	C09K 11/06	(2006.01)
	H10K 50/17	(2006.01)
	H10K 71/12	(2006.01)
	H10K 85/10	(2006.01)
	H10K 85/30	(2006.01)
	H10K 85/60	(2006.01)

(52) U.S. Cl.

(57) ABSTRACT

The present disclosure provides an organic light-emitting diode, a method of manufacturing the same, and an organic light-emitting diode display apparatus. The organic light-emitting diode includes an anode; a hole injection layer; a hole transport layer; an electron blocking layer; an organic luminescent layer; a hole blocking layer; an electron transport layer; and a cathode, wherein a first composite layer is provided between the electron blocking layer and the organic luminescent layer, and the first composite layer includes a material of the electron blocking layer and a host material of the organic luminescent layer.

