



US 20240213432A1

(19) **United States**

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

(10) **Pub. No.: US 2024/0213432 A1**

(43) **Pub. Date: Jun. 27, 2024**

(54) **LIGHT EMITTING CHIP AND PRODUCING METHOD THEREOF, AND LIGHT EMITTING APPARATUS**

**H01L 33/38** (2006.01)

**H01L 33/62** (2006.01)

(52) **U.S. CL.**

**CPC** ..... **H01L 33/642** (2013.01); **H01L 25/0753** (2013.01); **H01L 33/382** (2013.01); **H01L 33/62** (2013.01); **H01L 33/641** (2013.01); **H01L 2933/0016** (2013.01); **H01L 2933/0075** (2013.01)

(71) Applicants: **BOE MLED Technology Co., Ltd.**, Beijing (CN); **BOE Technology Group Co., Ltd.**, Beijing (CN)

(72) Inventors: **Shanwei YANG**, Beijing (CN); **Junjie MA**, Beijing (CN); **Yuanda LU**, Beijing (CN); **Zhijun XIONG**, Beijing (CN); **Linxia QI**, Beijing (CN); **Jiawei ZHAO**, Beijing (CN); **Yuanhao SUN**, Beijing (CN)

(21) Appl. No.: **17/918,214**

(22) PCT Filed: **Oct. 29, 2021**

(86) PCT No.: **PCT/CN2021/127403**

§ 371 (c)(1),

(2) Date: **Oct. 11, 2022**

**Publication Classification**

(51) **Int. Cl.**

**H01L 33/64** (2006.01)

**H01L 25/075** (2006.01)

(57)

**ABSTRACT**

The present disclosure provides a light emitting chip and a producing method thereof, and a light emitting apparatus. The light emitting chip includes a patterned substrate; a light emitting unit, wherein the light emitting unit includes an electron injection layer, a luminescent layer and a hole injection layer; a first electrode, wherein the first electrode is connected to the electron injection layer; a second electrode, wherein the second electrode is connected to the hole injection layer; a first passivation layer, wherein the first passivation layer partially covers the light emitting unit, the first electrode and the second electrode, the first passivation layer includes a first opening, and the light emitting unit partially exposes from the first opening; and a heat dissipating layer, wherein the heat dissipating layer covers the first passivation layer, and a part of the light emitting unit exposing from the first passivation layer.

