



(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2007/0126020 A1**

Lin et al.

(43) **Pub. Date: Jun. 7, 2007**

(54) **HIGH-POWER LED CHIP PACKAGING STRUCTURE AND FABRICATION METHOD THEREOF**

(57) **ABSTRACT**

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A packaging structure and a related fabrication method for high-power LED chip are provided herein, which mainly contains a base made of a metallic material and an electrically insulating material integrated into a single object. The metallic material forms a heat sinking seat in the middle of the base, which is exposed from the top surface of the base, and from the bottom surface or a side surface of the base. The metallic material also forms a plurality of electrodes surrounding the heat sinking seat, which are exposed from the top surface of the base, and from the bottom surface or a side surface of the base, respectively. The electrically insulating material is interposed between the electrodes and the heat sinking seat so that they are adhere together, and so that the heat sinking seat and any one of the electrodes, and any two electrodes are electrically insulated. The packaging structure achieves superior heat dissipation efficiency by separating the electricity and heat dissipation channels and, in another way, is applicable in mass production for a significantly reduced production cost.

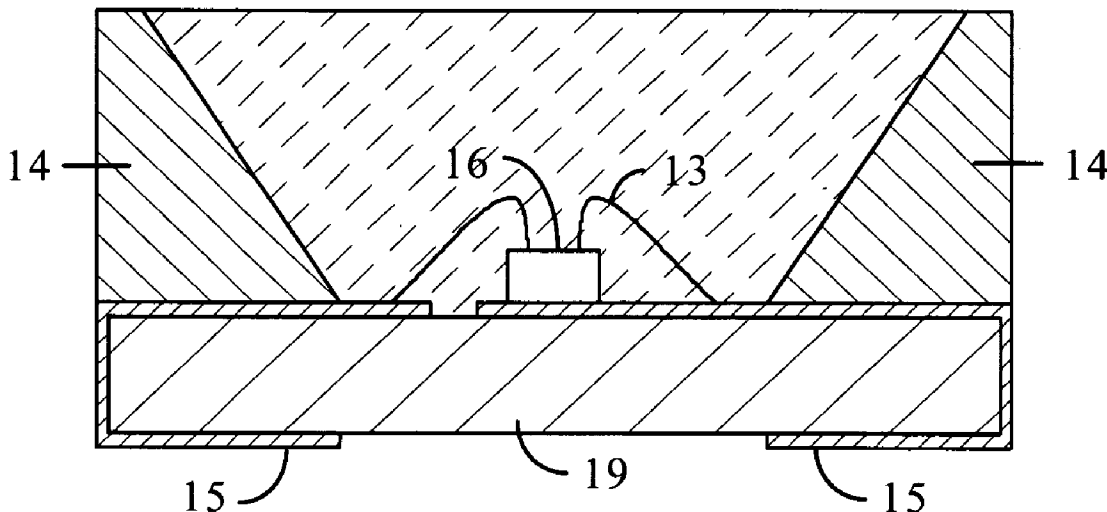
(21) Appl. No.: **11/294,135**

(22) Filed: **Dec. 3, 2005**

Publication Classification

(51) **Int. Cl.**
H01L 33/00 (2006.01)

(52) **U.S. Cl.** **257/100**



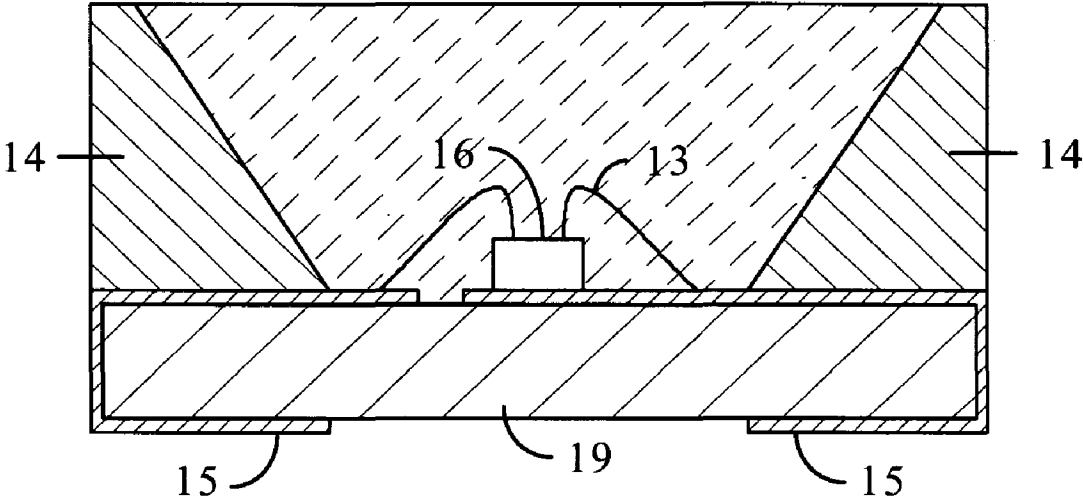


FIG. 1a

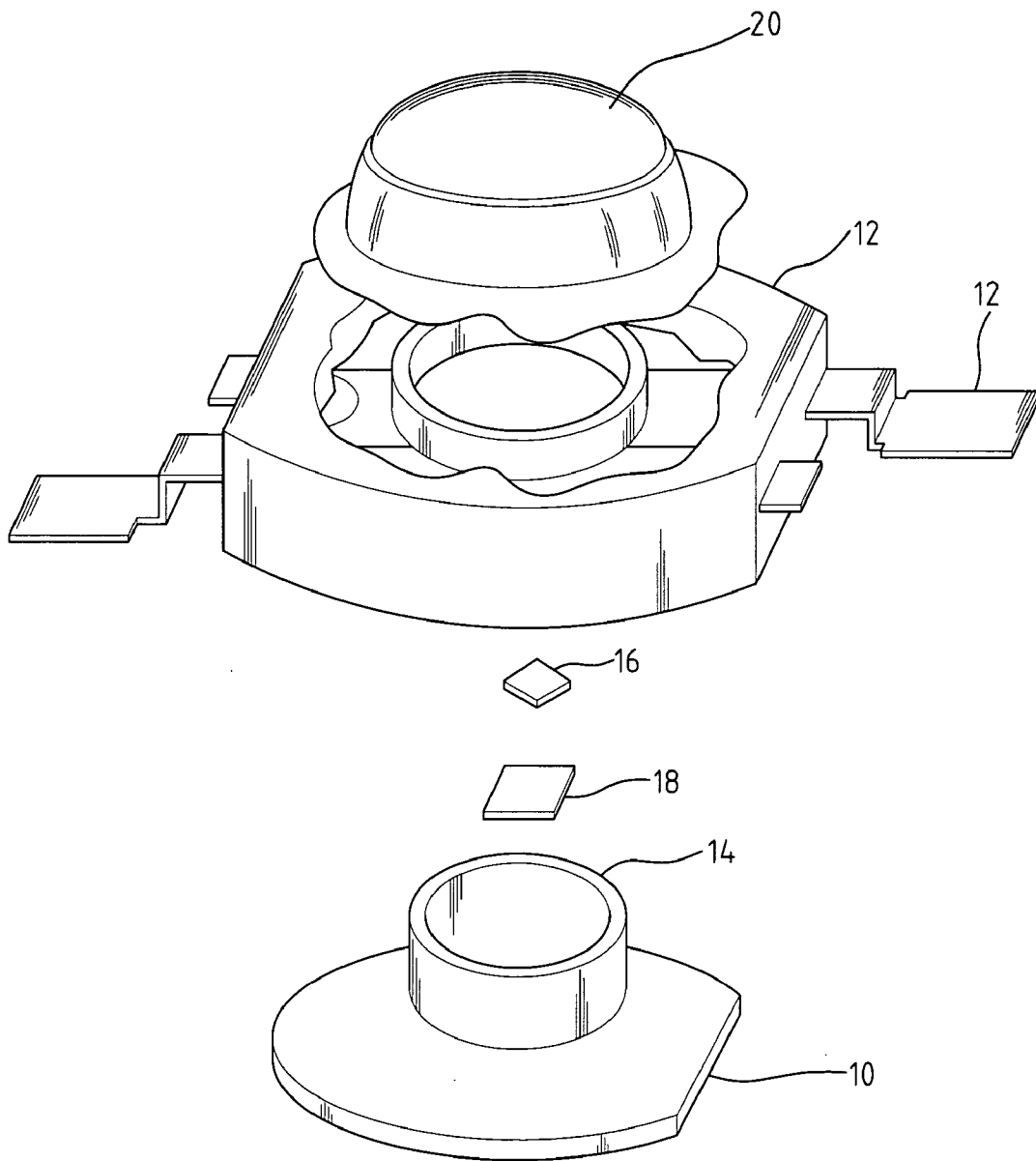


FIG. 1b

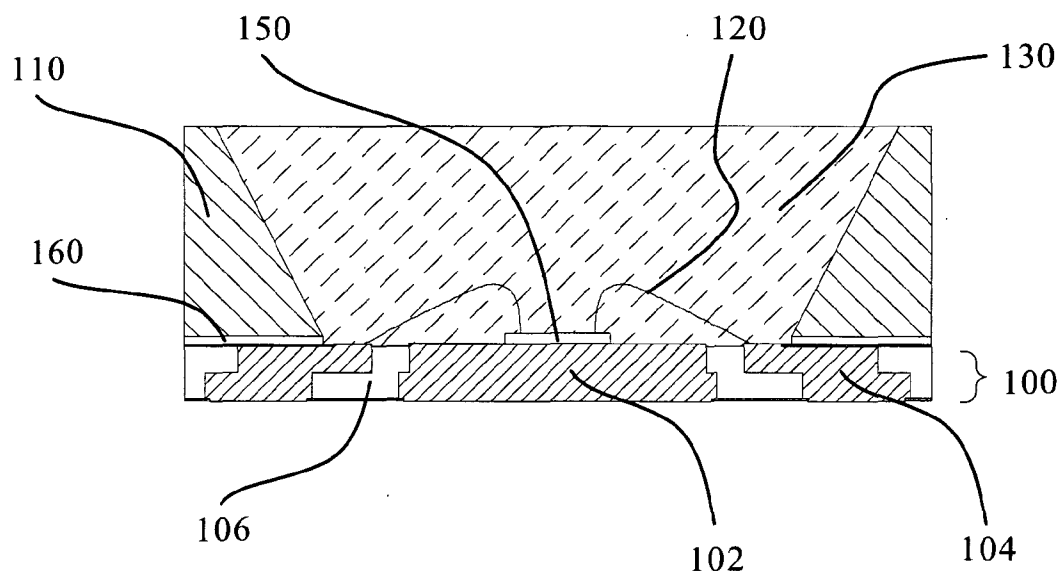


FIG. 2a

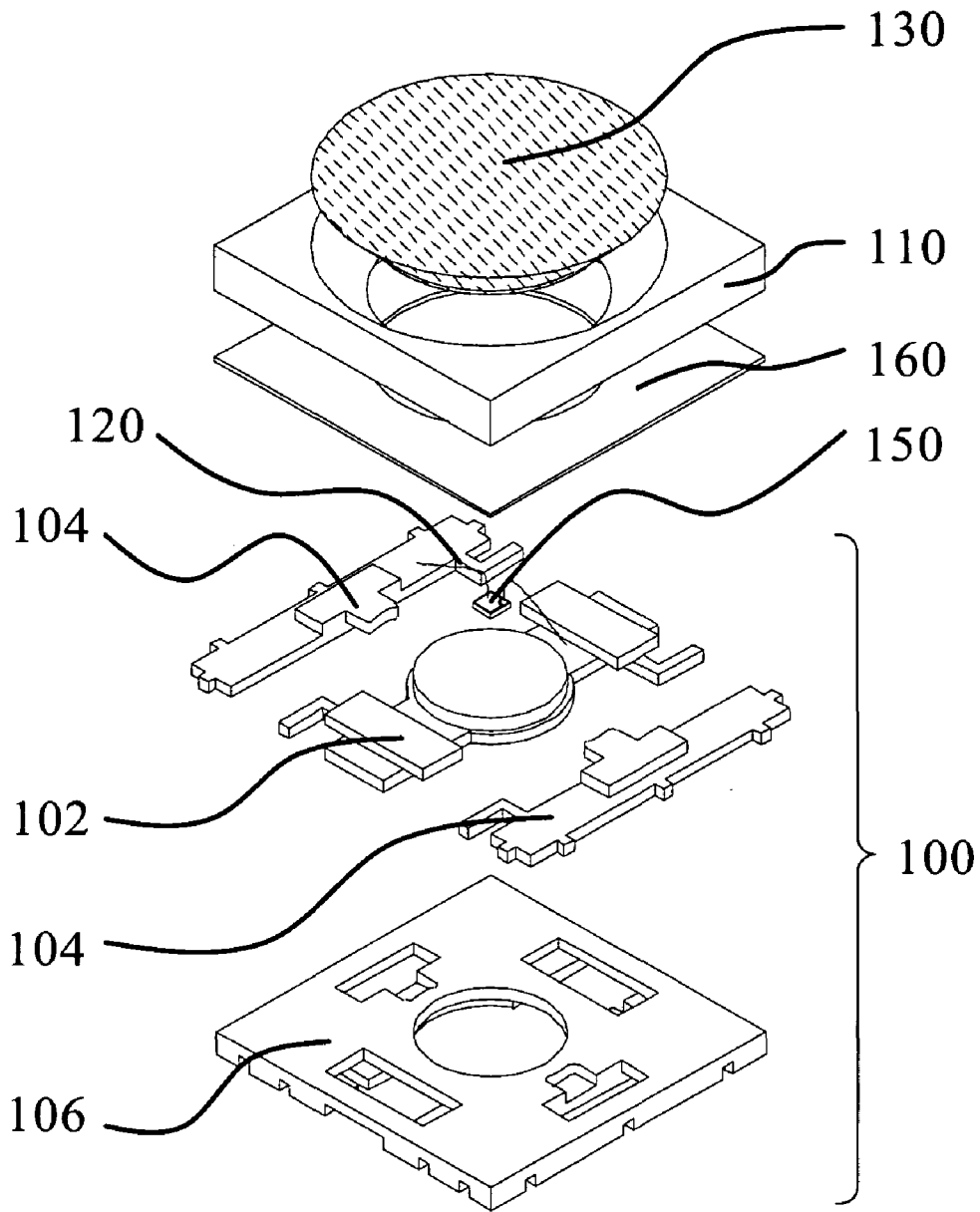


FIG. 2b

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