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(12) **United States Patent**  
**Ishidu et al.**

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(54) **LIGHT EMITTING ELEMENT MOUNTING MEMBER, AND SEMICONDUCTOR DEVICE USING THE SAME**

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(57) **ABSTRACT**

The object of the present invention is to provide a light-emitting element mounting member and a semiconductor device using the same that is easy to process and that allows adequate heat dissipation.

A light-emitting element mounting member 200 includes: a substrate 2 including an element mounting surface 2a mounting a semiconductor light-emitting element 1 and first and second conductive regions 21, 22 disposed on the element mounting surface 2a and connected to the semiconductor light-emitting element 1; a reflective member 6 including a reflective surface 6a defining an internal space 6b for housing the semiconductor light-emitting element 1 and containing a metal disposed on the element mounting surface 1a; and a metal layer 13 disposed on the reflective surface 6a. The reflective surface 6a is sloped relative to the element mounting surface 2a so that a diameter of the internal space 6b is greater away from the element mounting surface 2a.

**14 Claims, 6 Drawing Sheets**

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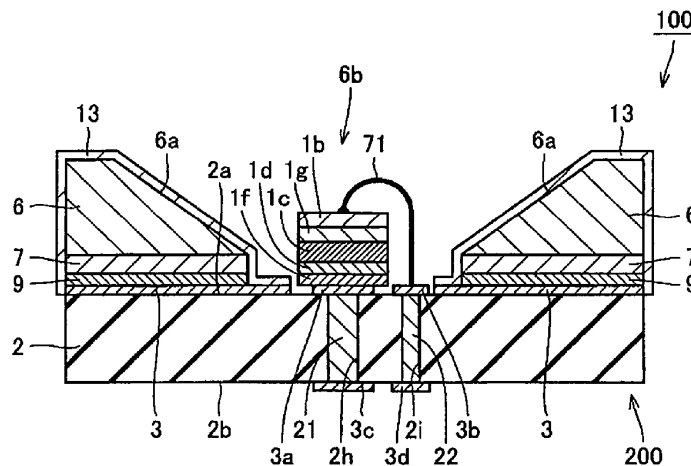
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(51) **Int. Cl.**  
**H01L 33/00** (2006.01)

(52) **U.S. Cl.** ..... **257/98; 257/79; 257/99**

(58) **Field of Classification Search** ..... 257/79,  
257/94-99; 372/43.01, 50.23; 362/613,  
362/623, 341, 345, 347-350, 800

See application file for complete search history.



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FIG. 2

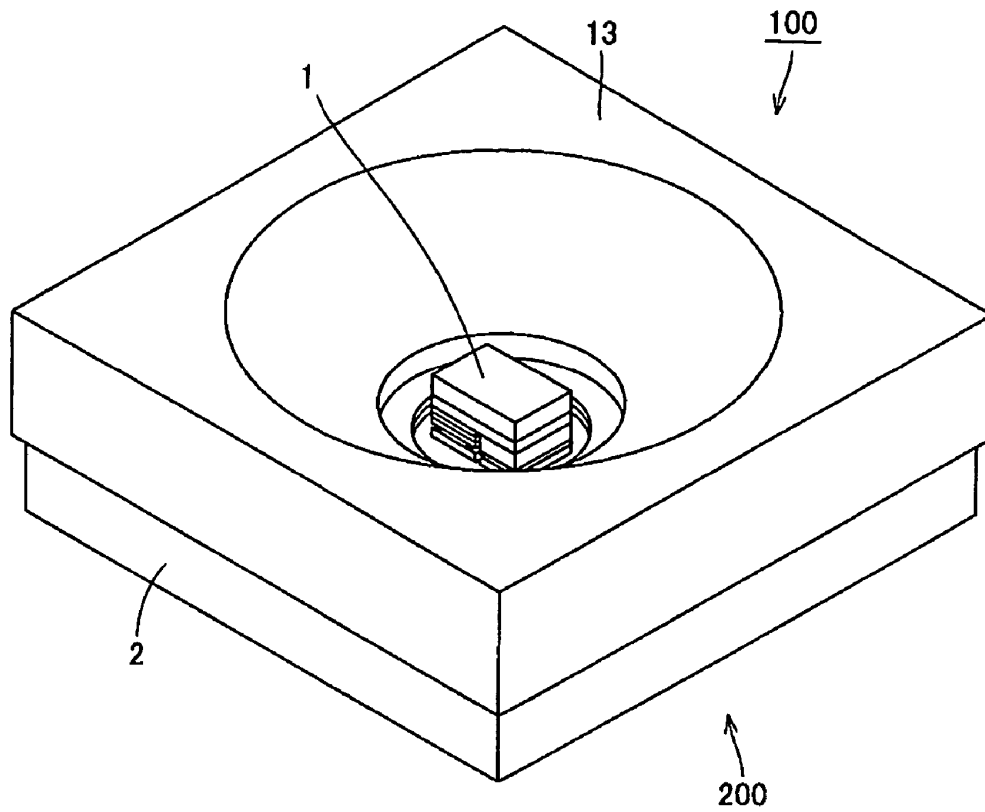


FIG. 3A

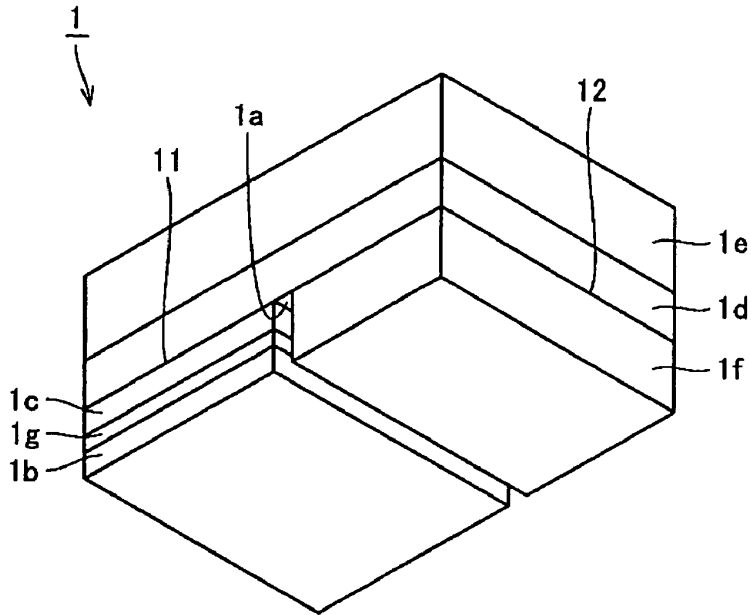


FIG. 3B1

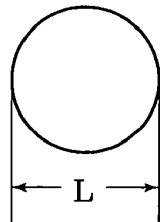


FIG. 3B2

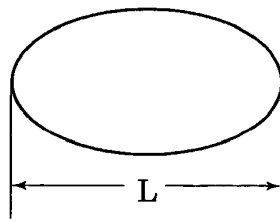


FIG. 3B3

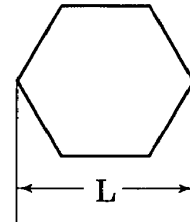


FIG. 3B4

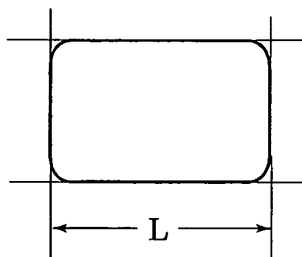
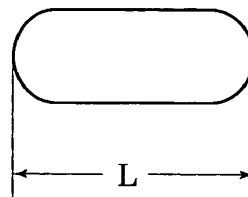


FIG. 3B5



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