



US00D477580S

(12) **United States Design Patent** (10) **Patent No.:** **US D477,580 S**  
**Kamada** (45) **Date of Patent:** **\*\* Jul. 22, 2003**

(54) **LIGHT EMITTING DIODE**  
(75) Inventor: **Kazuhiro Kamada**, Tokushima-ken (JP)  
(73) Assignee: **Nichia Corporation**, Anan (JP)  
(\*\*) Term: **14 Years**  
(21) Appl. No.: **29/164,203**  
(22) Filed: **Jul. 22, 2002**

*Primary Examiner*—Philip S. Hyder  
*Assistant Examiner*—Selina Sikder  
(74) *Attorney, Agent, or Firm*—Smith Patent Office

(30) **Foreign Application Priority Data**  
Jan. 30, 2002 (JP) ..... 2002-001973  
Jan. 30, 2002 (JP) ..... 2002-001974  
Jan. 30, 2002 (JP) ..... 2002-001975  
Jan. 30, 2002 (JP) ..... 2002-001976  
(51) **LOC (7) Cl.** ..... **13-03**  
(52) **U.S. Cl.** ..... **D13/182**  
(58) **Field of Search** ..... D10/104, 106;  
D13/180, 182; D26/2, 37; 257/88, 89, 93-96;  
313/161; 345/39, 82, 84; 361/820; 362/800

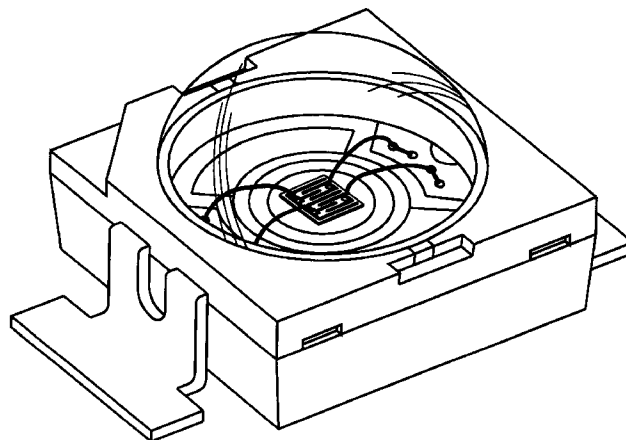
(57) **CLAIM**  
I claim the ornamental design for the light emitting diode, as shown and described.

(56) **References Cited**  
**U.S. PATENT DOCUMENTS**  
4,127,792 A \* 11/1978 Nakata ..... 313/500  
5,226,053 A \* 7/1993 Cho et al. .... 372/45  
RE36,614 E \* 3/2000 Lombard et al. .... 313/500  
D432,095 S \* 10/2000 Seeger et al. .... D13/182  
6,174,070 B1 \* 1/2001 Takamura et al. .... 362/183  
D437,798 S \* 2/2001 Kiba et al. .... D10/104  
D439,351 S \* 3/2001 Kiba et al. .... D26/37  
6,386,733 B1 \* 5/2002 Ohkohdo et al. .... 362/249  
6,450,663 B1 \* 9/2002 Reinbach ..... 362/249  
**FOREIGN PATENT DOCUMENTS**  
JP D1046442 S 8/1999  
JP D1046564 S 8/1999  
JP D1046565 S 8/1999

**DESCRIPTION**  
FIG. 1 is a perspective view of a LED having a LED chip and showing my new design;  
FIG. 2 is a plan view of the LED having a LED chip according to the embodiment of FIG. 1;  
FIG. 3 is a left view of the LED according to the embodiment of FIG. 1;  
FIG. 4 is a front elevational view of the LED according to the embodiment of FIG. 1;  
FIG. 5 is a right view of the LED according to the embodiment of FIG. 1;  
FIG. 6 is a bottom plan view of the LED according to the embodiment of FIG. 1;  
FIG. 7 is a rear view of the LED according to the embodiment of FIG. 1;  
FIG. 8 is a perspective view of the LED according to another embodiment of my new design;  
FIG. 9 is a plan view of the LED according to the embodiment of FIG. 8;  
FIG. 10 is a left view of the LED according to the embodiment of FIG. 8;  
FIG. 11 is a front elevational view of the LED according to the embodiment of FIG. 8;  
FIG. 12 is a right view of the LED according to the embodiment of FIG. 8;  
FIG. 13 is a bottom plan view of the LED according to the embodiment of FIG. 8; and,  
FIG. 14 is a rear view of the LED according to the embodiment of FIG. 8.

\* cited by examiner

**1 Claim, 4 Drawing Sheets**



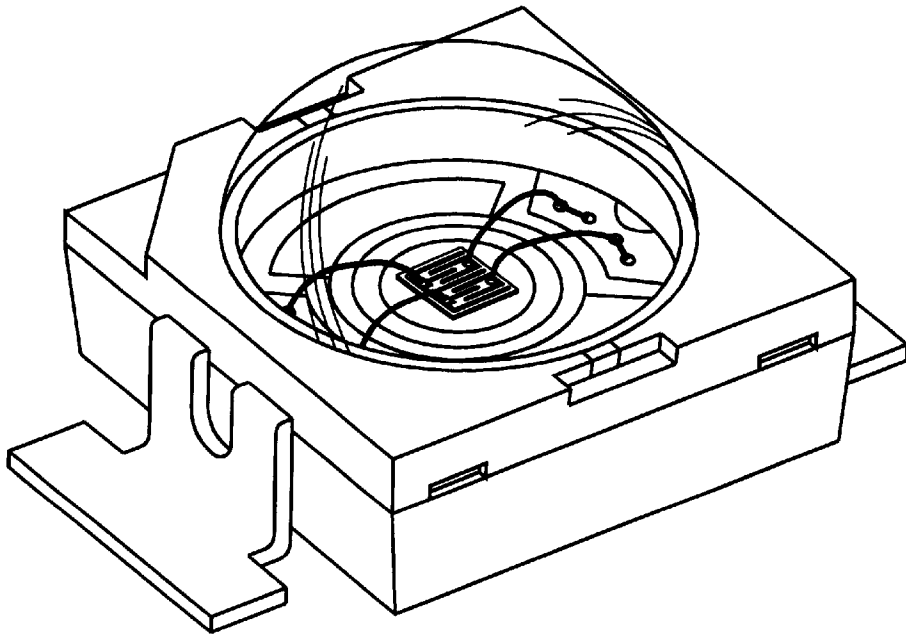


FIG. 1

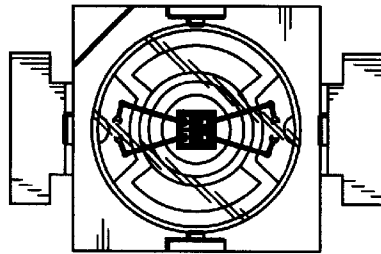


FIG. 2

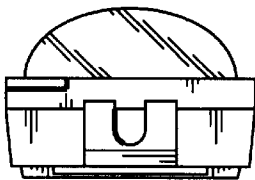


FIG. 3

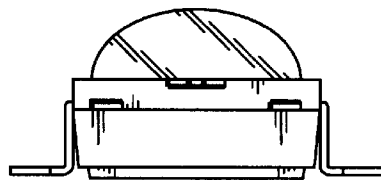


FIG. 4

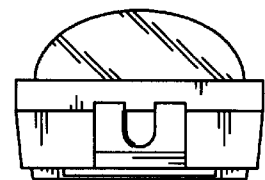


FIG. 5

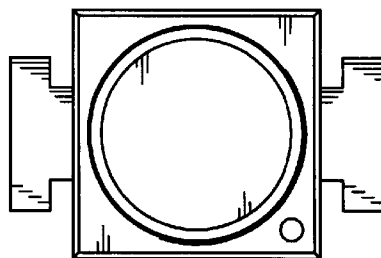


FIG. 6

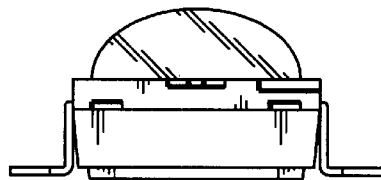


FIG. 7

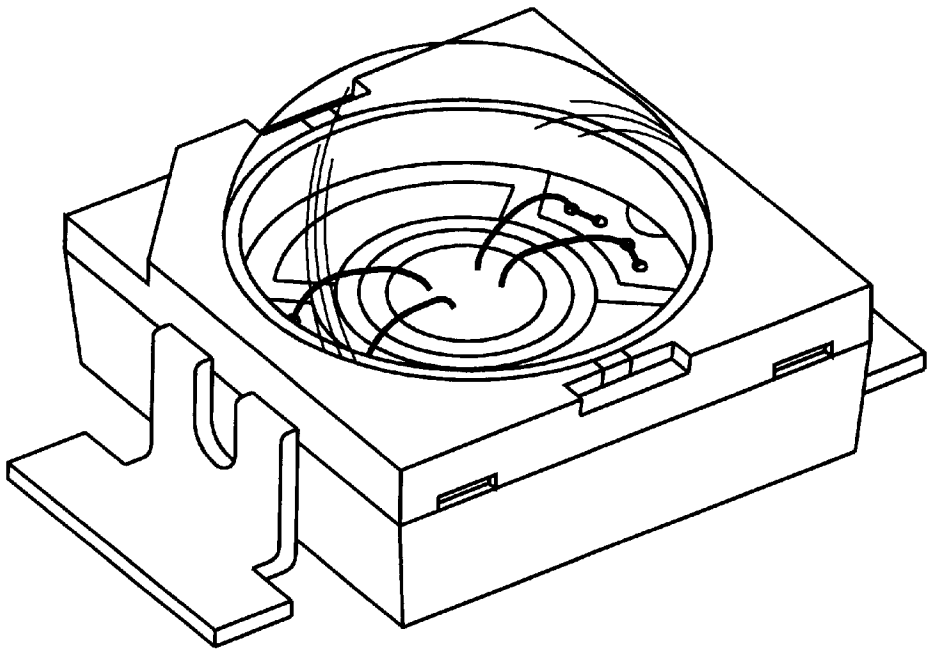


FIG. 8

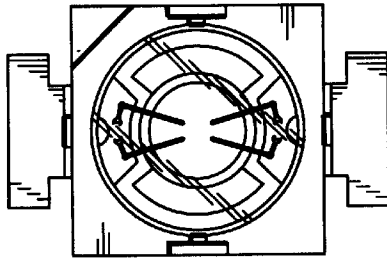


FIG. 9

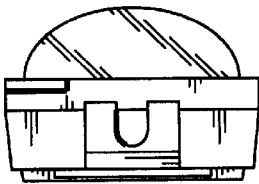


FIG. 10

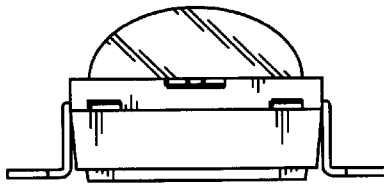


FIG. 11

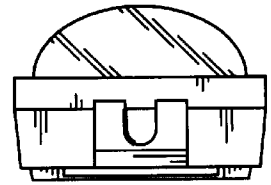


FIG. 12

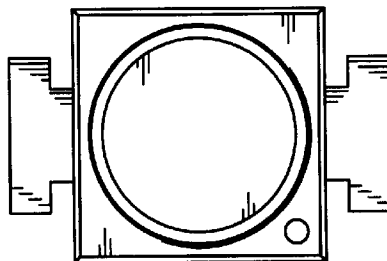


FIG. 13

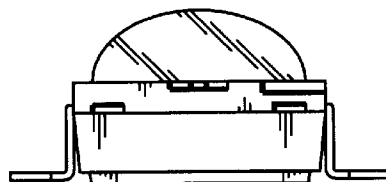


FIG. 14