United States Patent [19]

Takahashi et al.

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[54] LIGHT-EMITTING DIODE SEMICONDUCTOR CHIP WITH LEADS

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Japan

[**] Term: 14 Years

[21] Appl. No.: 372,643

[56]

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[30] Foreign Application Priority Data

		<u>.</u>
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[58] Field of Sea	rch D	13/99: D26/1: 362/900.

313/499, 500, 501, 512; 357/17, 74

References Cited

U.S. PATENT DOCUMENTS

3,458,779 3,510,732 3,774,086 3,962,719	5/1961 7/1969 5/1970 11/1973 6/1976	Weiss 357/74 Andres et al. 357/74 Blank et al. 313/499 X Amans 313/501 X Vincent, Jr 357/17 X Pfaff 174/138 G X Schöberl 313/512 X
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OTHER PUBLICATIONS

Allied Industrial Electronics Catalog 1964, p. 78, Photocell #B425.

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[57]

CLAIM

The ornamental design for a light-emitting diode semiconductor chip with leads, substantially as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a light-emitting diode semiconductor chip with leads showing our new design; FIG. 2 is a front elevational view thereof;

FIG. 3 is a side elevational view thereof, as seen from the right side of FIG. 1;

FIG. 4 is a side elevational view thereof, as seen from the left side of FIG. 1:

FIG. 5 is a top plan view thereof;

FIG. 6 is a bottom plan view thereof;

FIG. 7 is a perspective view of a light-emitting diode semiconductor chip with leads showing the second embodiment of our new design;

FIG.8 is a front elevational view thereof;

FIG. 9 is a side elevational view thereof, as seen from the right side of FIG. 7;

FIG. 10 is a side elevational view thereof, as seen from the left side of FIG. 7;

FIG. 11 is a top plan view thereof; and

FIG. 12 is a bottom plan view thereof.





