

(12) United States Design Patent (10) Patent No.: US D572,671 S Okada et al. (45) Date of Patent: ** Jul. 8, 2008

(57)

- (54) LIGHT EMITTING DIODE
- (75) Inventors: Satoshi Okada, Anan (JP); Yuji Satake, Anan (JP)
- (73) Assignee: Nichia Corporation, Anan-shi (JP)
- (**) Term: 14 Years
- (21) Appl. No.: **29/266,468**

CLAIM

The ornamental design for a light emitting diode, as shown and described.

DESCRIPTION

FIG. 1 is a front top side perspective view of a light emitting

(22) Filed: Sep. 22, 2006

Mar. 30, 2006	(JP)	
Mar. 30, 2006	(JP)	

(51)	LOC (8) Cl.	13-03
(52)	U.S. Cl.	D13/180
(=		D 1 1 1 1 0 0

 (58) Field of Classification Search D13/180; D26/2; 257/79, 80, 81, 88, 89, 95, 98, 99, 257/100; 313/483, 498, 500; 362/555, 800 See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6 429 464 B1* 8/2002 Lin

257/00

diode in accordance with a first embodiment of my new design;

FIG. 2 is a top plan view of the light emitting diode in accordance with the first embodiment of my new design;

FIG. **3** is a bottom plan view of the light emitting diode in accordance with the first embodiment of my new design;

FIG. **4** is a front elevational view of the light emitting diode in accordance with the first embodiment of my new design;

FIG. **5** is a rear elevational view of the light emitting diode in accordance with the first embodiment of my new design;

FIG. **6** is a left side end elevational view of the light emitting diode in accordance with the first embodiment of my new design;

FIG. 7 is a right side end elevational view of the light emitting diode in accordance with the first embodiment of my new design;

FIG. **8** is a front top side perspective view of a light emitting diode in accordance with a second embodiment of my new design;

FIG. 9 is a top plan view of the light emitting diode in accordance with the second embodiment of my new design;FIG. 10 is a bottom plan view of the light emitting diode in accordance with the second embodiment of my new design;FIG. 11 is a front elevational view of the light emitting diode in accordance with the second embodiment of my new design;

0,429,404	BI *	8/2002	Lin 257/99
D524,260	S *	7/2006	Ishizaka et al D13/180
7,224,000	B2 *	5/2007	Aanegola et al 257/98
7,262,438	B2 *	8/2007	Mok et al 257/98
2004/0041222	A1*	3/2004	Loh
2005/0045903	A1*	3/2005	Abe et al 257/100
2006/0001361	A1*	1/2006	Imai et al 313/498
2006/0273338	A1*	12/2006	Lee et al 257/99

* cited by examiner

Primary Examiner—Selina Sikder (74) Attorney, Agent, or Firm—Global IP Counselors, LLP FIG. **12** is a rear elevational view of the light emitting diode in accordance with the second embodiment of my new design; FIG. **13** is a left side end elevational view of the light emitting diode in accordance with the second embodiment of my new design;



US D572,671 S Page 2

FIG. 14 is a right side end elevational view of the light emitting diode in accordance with the second embodiment of my new design;

FIG. **15** is a front top side perspective view of a light emitting diode in accordance with a third embodiment of my new design;

FIG. 16 is a top plan view of the light emitting diode in accordance with the third embodiment of my new design;FIG. 17 is a bottom plan view of the light emitting diode in accordance with the third embodiment of my new design;FIG. 18 is a front elevational view of the light emitting diode

FIG. 23 is a top plan view of the light emitting diode in accordance with the fourth embodiment of my new design;

FIG. **24** is a bottom plan view of the light emitting diode in accordance with the fourth embodiment of my new design;

FIG. **25** is a front elevational view of the light emitting diode in accordance with the fourth embodiment of my new design;

FIG. **26** is a rear elevational view of the light emitting diode in accordance with the fourth embodiment of my new design;

FIG. 27 is a left side end elevational view of the light emitting diode in accordance with the fourth embodiment of my new design; and,

in accordance with the third embodiment of my new design;

FIG. **19** is a rear elevational view of the light emitting diode in accordance with the third embodiment of my new design;

FIG. 20 is a left side end elevational view of the light emitting diode in accordance with the third embodiment of my new design;

FIG. **21** is a right side end elevational view of the light emitting diode in accordance with the third embodiment of my new design;

FIG. 22 is a front top side perspective view of a light emitting diode in accordance with a fourth embodiment of my new design;

FIG. **28** is a right side end elevational view of the light emitting diode in accordance with the fourth embodiment of my new design.

The broken line showing of environment (the remaining structure of the light emitting diode) in the Figures is for illustrative purposes only and forms no part of the claimed design.

The opaque line shading illustrates a translucent portion of the light emitting diode.

1 Claim, 16 Drawing Sheets

U.S. Patent Jul. 8, 2008 Sheet 1 of 16 US D572,671 S



U.S. Patent Jul. 8, 2008 Sheet 2 of 16 US D572,671 S



F I G. 2





U.S. Patent Jul. 8, 2008 Sheet 3 of 16 US D572,671 S



FIG. 4



U.S. Patent Jul. 8, 2008 Sheet 4 of 16 US D572,671 S



FIG.6





U.S. Patent Jul. 8, 2008 Sheet 5 of 16 US D572,671 S



U.S. Patent Jul. 8, 2008 Sheet 6 of 16 US D572,671 S



FIG. 9





U.S. Patent Jul. 8, 2008 Sheet 7 of 16 US D572,671 S



FIG. 11



U.S. Patent Jul. 8, 2008 Sheet 8 of 16 US D572,671 S



FIG. 13



U.S. Patent Jul. 8, 2008 Sheet 9 of 16 US D572,671 S



U.S. Patent Jul. 8, 2008 Sheet 10 of 16 US D572,671 S



FIG. 16





U.S. Patent Jul. 8, 2008 Sheet 11 of 16 US D572,671 S



FIG. 18



U.S. Patent Jul. 8, 2008 Sheet 12 of 16 US D572,671 S



FIG. 20





U.S. Patent Jul. 8, 2008 Sheet 13 of 16 US D572,671 S



U.S. Patent Jul. 8, 2008 Sheet 14 of 16 US D572,671 S



FIG. 23





FIG. 24

.

U.S. Patent Jul. 8, 2008 Sheet 15 of 16 US D572,671 S





FIG. 25



U.S. Patent Jul. 8, 2008 Sheet 16 of 16 US D572,671 S



FIG. 27

.

