31

Receipt Number
566606

UNITED STATED DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

BEST LIGHTING PRODUCTS, INC., an Ohio corporation, Plaintiff, v. CONTRAILS, LLC d/b/a HD LIGHTING, a Washington limited liability company, Defendant.	**Case: 2:08-cv-10324** **Judge: Rosen, Gerald E** **Referral MJ: Hluchaniuk, Michael J.** **Filed: 01-23-2008 At 10:25 AM** **CMP BEST LIGHTING PRODUCTS, INC V CONTRAILS, LLC (EW)** **COMPLAINT AND JURY DEMAND**

RICHARD W. HOFFMANN (P42352)
Reising Ethington Barnes Kisselle PC
201 W. Big Beaver Road, Suite 400
PO Box 4390
Troy, Michigan 48099-4390
Telephone: 248-689-3500
Facsimile: 248-689-4071
Email: hoffmann@reising.com

Counsel for Plaintiff Best Lighting Products, Inc.

COMPLAINT

Plaintiff Best Lighting Products, Inc. files its Complaint against Defendant Contrails, LLC d/b/a HD Lighting as follows:

PARTIES

1. Plaintiff Best Lighting Products, Inc. (hereafter "Plaintiff" or "Best Lighting") is a corporation organized and existing under the laws of the State of Delaware having a principal place of business located at 1213 Etna Parkway, Pataskala, Ohio 43062.

2. Upon information and belief, Defendant Contrails, LLC does business as HD Lighting (hereafter "HD Lighting" or "Defendant") and is a corporation organized and existing

under the laws of the State of Washington and having a place of business located at 10900 NE 4th Street, Bellevue, Washington 98004.

JURISDICTION AND VENUE

3. This action for patent infringement arises under the Patent Laws of the United States Code, 35 U.S.C. §1 et seq. This Court has jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338.

4. Venue is proper in this Court pursuant to 28 U.S.C. §§1391 and 1400(b).

FACTS

5. Plaintiff develops and sells lighting products.

6. Defendant is a seller of lighting products.

7. At one time, Defendant distributed one of Plaintiff's products sometimes referred to as a "Combo Light".

8. Defendant no longer distributes Plaintiff's Combo Light. Since the time Defendant ceased distributing Plaintiff's products, Defendant began selling Combo Lights obtained from a source other than Plaintiff.

CAUSES OF ACTION

Count I - Infringement Of United States Patent No. 6,309,085

9. Plaintiff realleges and incorporates by reference every allegation contained in paragraphs 1 - 8 of this Complaint.

10. Plaintiff is the owner of United States Patent No. 6,309,085 entitled LAMP SUPPORT FOR EMERGENCY LIGHT FIXTURE (hereafter the "'085 patent"), which patent was duly and legally issued on October 30, 2001. (Exhibit A)

11. Upon information and belief, Defendant has infringed, is infringing and is threatening to infringe the '085 patent by making, using, offering to sell, and selling infringing light fixtures. The acts of infringement by Defendant have taken place and are taking place in this district and elsewhere.

12. Upon information and belief, the acts of infringement by the Defendant have been willful and deliberate, and Defendant has made unlawful gains and profits from the infringement.

13. Unless enjoined by this Court, Defendant will continue its infringement of the '085 patent; and Plaintiff has been and will continue to be seriously and irreparably injured.

Count II - Infringement Of United States Patent No. 6,606,808

14. Plaintiff realleges and incorporates by reference every allegation contained in paragraphs 1 - 13 of this Complaint.

15. Plaintiff is the owner of United States Patent No. 6,606,808 entitled EXIT SIGN WITH ROTATABLE LIGHTING HEADS (hereafter the "'808 patent"), which patent was duly and legally issued on August 19, 2003. (Exhibit B)

16. Upon information and belief, Defendant has infringed, is infringing and is threatening to infringe the '808 patent by making, using, offering to sell, and selling infringing light fixtures. The acts of infringement by Defendant have taken place and are taking place in this district and elsewhere.

17. Upon information and belief, the acts of infringement by the Defendant have been willful and deliberate, and Defendant has made unlawful gains and profits from the infringement.

18. Unless enjoined by this Court, Defendant will continue its willful infringement of the '808 patent; and Plaintiff has been and will continue to be seriously and irreparably injured.

Count III - Infringement Of United States Design Patent No. D440,336

19. Plaintiff realleges and incorporates by reference every allegation contained in paragraphs 1 - 18 of this Complaint.

20. Plaintiff is the owner of United States Design Patent No. D440,336 entitled LAMP SUPPORT FOR EMERGENCY LIGHT FIXTURE (hereafter the "'336 patent"), which patent was duly and legally issued on April 10, 2001. (Exhibit C)

21. Upon information and belief, Defendant has infringed , is infringing and is threatening to infringe the '336 patent by making, using, offering to sell, and selling infringing light fixtures. The acts of infringement by Defendant have taken place and are taking place in this district and elsewhere.

22. Upon information and belief, the acts of infringement by the Defendant have been willful and deliberate, and Defendant has made unlawful gains and profits from the infringement.

23. Unless enjoined by this Court, Defendant will continue its willful infringement of the '336 paten;t and Plaintiff has been and will continue to be seriously and irreparably injured.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays that this Court:

A. Enter judgment that Defendant has infringed United States Patent Nos. 6,309,085; 6,606,808; and D440,336;

B. Enter a preliminary and permanent injunction restraining Defendant, its respective officers, agents, servants, and employees, and each of them and anyone acting in concert with them, from infringing United States Patent Nos. 6,309,085; 6,606,808; and D440,336;

C. Order Defendant to pay all damages sustained by Plaintiff resulting from Defendant's infringement of United States Patent Nos. 6,309,085; 6,606,808; and D440,336 and to compensate Plaintiff for such infringement;

D. Increased damages up to three times;

E. Declare this case exceptional;

F. Order Defendant to pay Plaintiff's attorney fees;

G. Order Defendant to pay Plaintiff's costs, expenses and disbursements; and

H. Award other and further relief that this Court deems just and proper.

Respectfully submitted,

by _____

RICHARD W. HOFFMANN (P42352)
Reising Ethington Barnes Kisselle PC
201 West Big Beaver Road, Suite 400
Troy, Michigan 48084
Telephone: 248-689-3500
Facsimile: 248-689-4071
Email: hoffmann@reising.com

Counsel for Plaintiff Best Lighting Products, Inc.

Dated: January 22, 2008

JURY DEMAND

Plaintiff, Best Lighting Products, Inc. hereby demands a trial by jury.

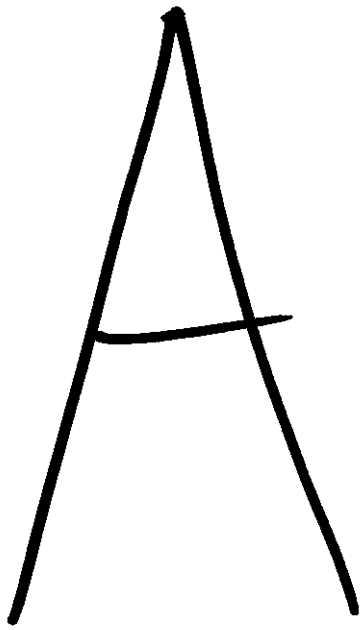
Respectfully submitted,

by _____

RICHARD W. HOFFMANN (P42352)
Reising Ethington Barnes Kisselle PC
201 West Big Beaver Road, Suite 400
Troy, Michigan 48084
Telephone: 248-689-3500
Facsimile: 248-689-4071
Email: hoffmann@reising.com

Counsel for Plaintiff Best Lighting Products, Inc.

Dated: January 22, 2008



US006309085B1

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

(10) **Patent No.: US 6,309,085 B1**
(45) **Date of Patent: Oct. 30, 2001**

(54) **LAMP SUPPORT FOR EMERGENCY LIGHT FIXTURE**

(75) Inventors: **Albert Alvin Katz**; **Richard Melbourne Haughton**, both of Newport Beach, CA (US)

(73) Assignee: **Best Lighting Products, Inc.**, Santa Ana, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/558,182**

(22) Filed: **Apr. 26, 2000**

(51) **Int. Cl.**[7] **F21V 17/18**

(52) **U.S. Cl.** **362/234**; 362/147; 362/404; 362/427; 362/287; 248/222.11; 248/222.12; 248/222.13; 248/224.51

(58) **Field of Search** 248/222.12, 222.11, 248/222.13, 224.51; 362/147, 404, 427, 287

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,701,833	*	10/1987	Bornhost	362/299
4,727,460	*	2/1988	Payne	362/269
5,526,251	*	6/1996	Andre et al.	362/396
5,735,498	*	4/1998	Jue et al.	248/222.12
5,797,673	*	8/1998	Logan et al.	362/234
6,142,648	*	11/2000	Logan et al.	362/234

* cited by examiner

Primary Examiner—Anita King
Assistant Examiner—Steven M Marsh
(74) *Attorney, Agent, or Firm*—Price and Gess

(57) **ABSTRACT**

A lamp support comprises a plurality of attachment ends affixed to a bottom surface of a base member to attach the base member of the lamp support to a stationary object, preferably, an emergency exit sign. A pair of stems, equipped with a pair of engaging members at one end, extend from an upper surface of the base members. The engaging members face each other at one end. The engaging members include a plurality of flexible teeth that interface with a plurality of rotational faces located in a pair of rotational apertures located in a housing. The housing is attached to the pair of stems by the engaging member, enabling the housing to rotate 360 degrees on an axis created by the stems.

17 Claims, 2 Drawing Sheets

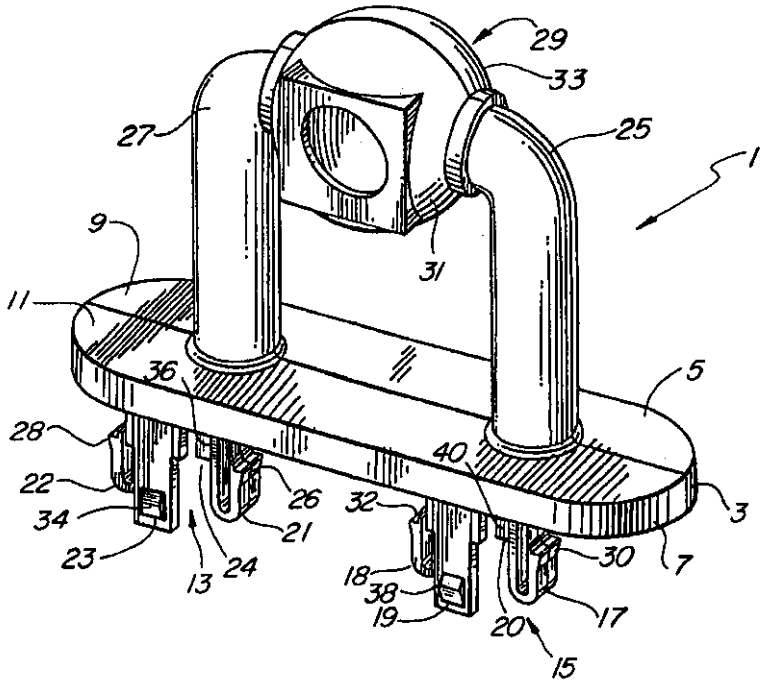


FIG. 1

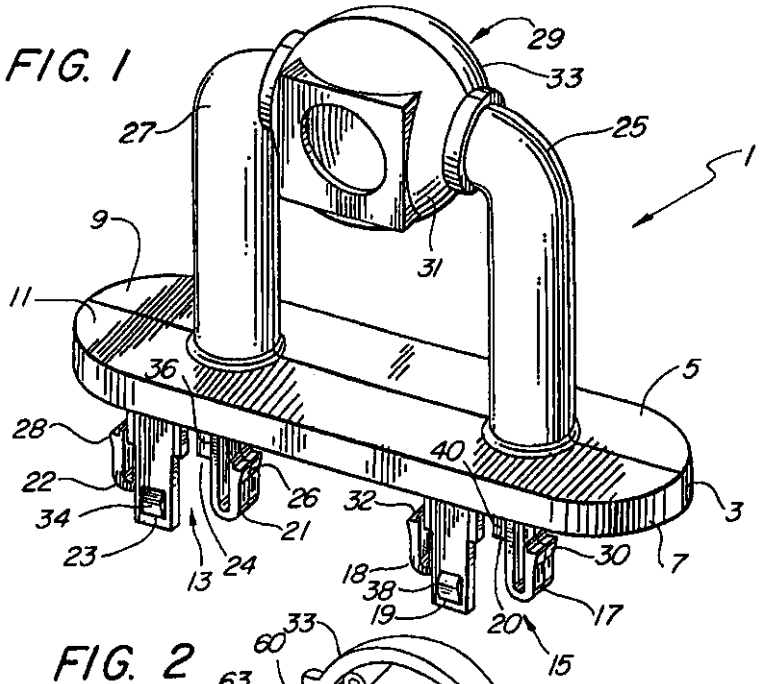
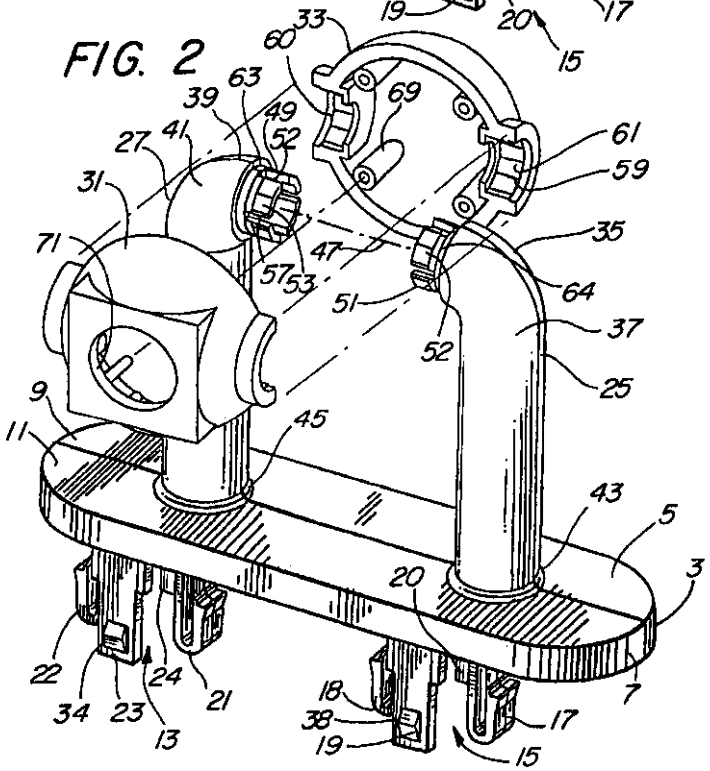

29
33
27
25
1
9
31
11
5
36
28
40
22
26
32
3
34
21
30
7
23
13
24
18
38
19
20
17
15

FIG. 2


33
60
63
69
39
49
61
27
41
52
59
31
71
47
35
57
53
51
64
37
52
25
9
45
11
43
5
20
3
22
24
18
34
23
21
38
17
13
19
15
7

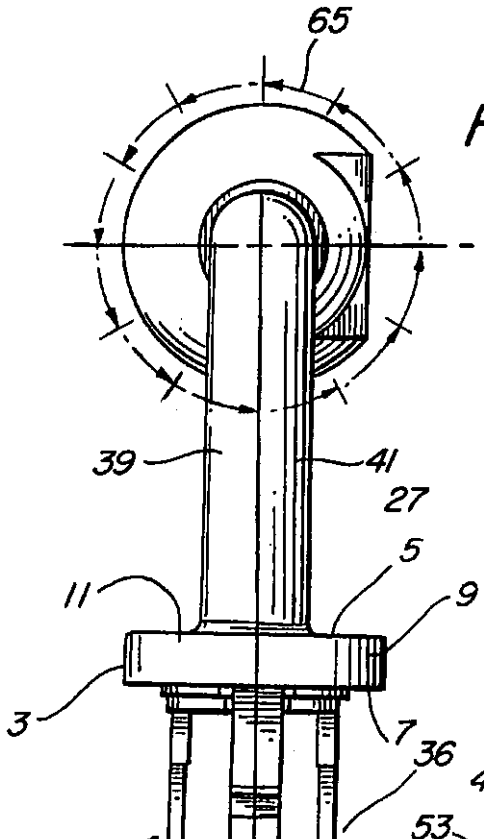


FIG. 3

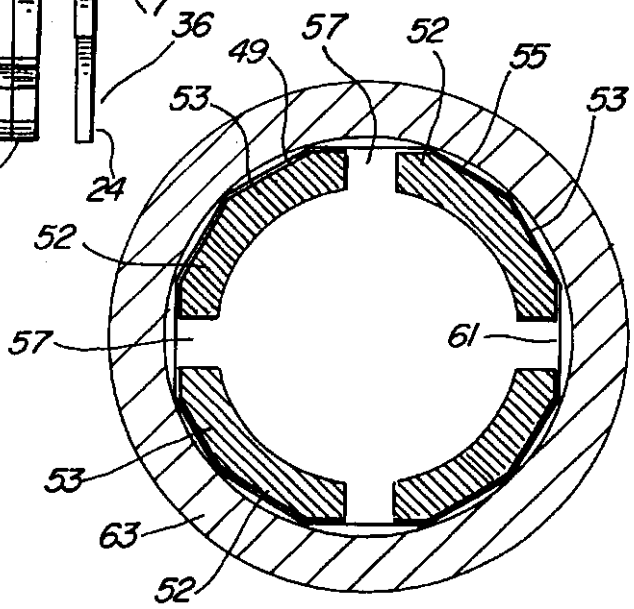


FIG. 4

LAMP SUPPORT FOR EMERGENCY LIGHT FIXTURE

BACKGROUND OF THE INVENTION

1. Field of Invention

This invention relates to a lamp support, and more specifically, a lamp support for an emergency light fixture.

2. Description of Related Art

A number of different lamp supports for an emergency light have been developed. For example, U.S. Pat. No. 5,461,550 describes a canopy mounting device for an exit sign. In the exit sign, a canopy bracket has a pair of resilient spring fingers that are inserted through a central circular opening of a mounting plate mounted to a standard electrical box located in a wall or ceiling. The spring fingers temporarily secure the canopy bracket to the mounting plate, allowing an installer to align and secure screws to the mounting plate, and thereby, facilitating installation. The wires from the electrical box are extended through the mounting plate and the canopy prior to securing the canopy to the mounting plate. Once secured, the installer fits a hub portion of the canopy bracket telescopically within an opening with the exit sign housing. Spring capture barb members of the hub engage the housing to fixedly secure the exit sign to the wall or ceiling.

U.S. Pat. No. 4,124,880 discusses a rotating signal light for emergency vehicles in which a plastic lamp holder is mounted on a vertically disposed rotatable shaft. The lamp holder has a symmetrical notched configuration allowing two of such holders to be mated, one inverted and rotated 90 degrees relative to the other, so that the holder assembly may mount four lamps.

U.S. Pat. No. 4,435,743 discloses a lighted exit sign comprising a light transmitting plate having a viewing side and upper and lower edges onto which light can be projected for transmission into the plate for viewing from the viewing side. Upper and lower printed circuit boards are supported close to the upper and lower edges of the plate. A plurality of small incandescent light bulbs, secured to the upper and lower circuit boards, producing this light into the plate for viewing.

U.S. Pat. No. 5,797,673 shows an emergency lighting unit/exit sign combination that provides one or more emergency lamps mountable at different locations on the periphery of the fixture housing. The lamps are mounted by lamp holders mounted with swiveling concentric spherical structural elements that allow limited movement.

Many different lamp supports for an emergency light have been developed but these inventions do not solve the problem of providing adequate positioning of an ambient and/or directed light source in an emergency situation. The present invention overcomes these drawbacks.

SUMMARY OF THE INVENTION

The present invention provides a lamp support for an emergency light fixture that has superior positioning capability for an ambient and/or directed light source. The lamp support comprises a plurality of attachment ends affixed to a bottom surface of a base member to attach the base member. The base member attaches to a stationary object, preferably, an emergency exit sign. A pair of stems, equipped with a pair of engaging members, extend from an upper surface of the base member to face each other. The engaging members each have a plurality of flexible teeth that interface with a plurality of rotational faces located in a pair of rotational apertures embodied in a housing which is rotatably attached to the pair of stems, enabling the housing to rotate 360 degrees on an axis created by the pair of stems.

BRIEF DESCRIPTION OF THE DRAWINGS

The exact nature of this invention as well as its objects and advantages will be readily appreciated as it becomes better understood upon consideration of the following detailed description of a preferred embodiment of the invention in conjunction with the accompanying drawings in which like reference numerals designate like parts throughout the figures thereon and wherein:

FIG. **1** is perspective view of the lamp support of the present invention;

FIG. **2** is an exploded view of the lamp support of FIG. **1**;

FIG. **3** is a left side elevational view of the lamp support of FIG. 1; and

FIG. **4** is a cross-sectional view of the light housing showing the rotational surfaces in the engaging members and the light housing.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to FIG. **1**, a preferred embodiment of a lamp support **1** according to the invention is illustrated. The lamp support **1** has a base member **3** with an upper surface **5** and a lower surface **7**. A first attachment end **13** and a second attachment end **15** is affixed to the lower surface **7** of the base member **3**. A first stem **25** and a second stem **27** is attached to the upper surface **5** of the base member **3**. A housing **29** is rotatably connected to the first stem **25** and the second stem **27**. The housing **29** provides support for a light structure of the type well known in the art.

The lamp support **1** is preferably constructed from a plastic material, such as polycarbonate/ABS, allowing the lamp support **1** to be molded. Use of molding to manufacture the lamp support reduces the number of parts that must be formed and assembled to produce the lamp support **1**.

The base member **3** has a length ranging from six to thirty centimeters, a width ranging from one-half to five centimeters and a height ranging from two to ten centimeters. The base member **3** may be a single unit. However, in the preferred embodiment, the base member **3** has a first half **9** and a second half **11**. This particular structure of the base member **3** eases the manufacturing process, i.e., molding, and expedites the assembly process. It is contemplated that the first half **9** and second half **11** may be connected with peg members (not shown) emanating from the first half **9** and being received by a receiving aperture located in the corresponding second half **11**. The peg members and their receiving apertures may be located one to five centimeters apart from one another in order to facilitate a firm connection between the first half **9** and the second half **11**. To further ensure a proper attachment between the first half **9** and the second half **11** of the base member **3**, an epoxy or other similar fastening substance may be used to affix the two halves together.

The first attachment end **13** and the second attachment end **15** are affixed to the lower surface **7** of the base member **3**. In the preferred embodiment, the first attachment end **13** comprises a first spring finger **21**, a second spring finger **22**, a first snap connector **23** and a second snap connector **24**. The second attachment end **15** comprises a first spring finger **17**, a second spring finger **18**, a first snap connector **19** and a second snap connector **20**. The first spring finger **21** of the

first attachment end **13** has a tab end **26** that provides a biasing action. The second spring finger **22** of the first attachment end **13** has a tab end **28** that also provides a biasing action. The first spring finger **17** of the second attachment end **15** has a tab end **30** that provides a biasing action. The second spring finger **18** of the second attachment end **15** has a tab end **32** that also provides a biasing action. The biasing action facilitates a snap-fit engagement of the each spring finger **17**, **18**, **21** and **22** when the first attachment end **13** and the second attachment end **15** are inserted in an opening of a stationary object, such as, an emergency exit sign. Each spring finger **17**, **18**, **21** and **22** is dimensionally sized and placed to resiliently attach to an interior of an opening in a stationary object.

The first snap connector **23** of the first attachment end **13**, the second snap connector **24** of the first attachment end **13**, the first snap connector **19** of the second attachment end **15** and the second snap connector **20** of the second attachment end **15** insure proper positioning of the lamp support **1** when connecting the lamp support **1** to the emergency exit sign and provide a snap-fit engagement implemented by the spring fingers **17**, **18**, **21**, **22** and the snap connectors **19**, **20**, **23**, **24**. The first snap connector **23** of the first attachment end **13** has a tab end **34**. The second snap connector **24** of the first attachment end **13** has a tab end **36** (FIG. **3**). The first snap connector **19** of the second attachment end **15** has a tab end **38**. The second snap connector **20** of the second attachment end **15** has a tab end **40** (not shown). Tab ends **34**, **36**, **38** and **40** of their respective snap connectors provide a biasing action that facilitate a snap-fit engagement of each snap connector **19**, **20**, **23** and **24** when the first attachment end **13** and the second attachment end **15** are inserted in the opening of the emergency exit sign. Each of the snap connectors **19**, **20**, **23** and **24** are dimensionally sized and placed to resiliently attach to the interior of the opening in the emergency exit sign, capable of sustaining the weight of the lamp support, and ensure that the lamp support **1** is securely fastened to the emergency exit sign.

It is contemplated that prior to final installation of the lamp support **1** to the emergency exit sign, electrical wires, emanating from the emergency exit sign, may be inserted into a pair of openings in the base member **3**, located at the foot of the first stem **25** and the second stem **27**, respectively, and fed through the first stem **25** and/or the second stem **27**, to connect to an electrical wire for a lighting structure affixed to the housing **29**.

The first stem **25** and the second stem **27** extend in an upward direction from the upper surface of the base member **5**. The first stem **25** and the second stem **27** have a length ranging from two to ten centimeters, a width ranging from one-half to five centimeters and a height ranging from one-half to five centimeters. As more clearly shown in FIG. **2**, the preferred embodiment comprises first stem **25** having a first half **35** and a second half **37**. A first attachment end **51** is located at their termination. The second stem **27** has a first half and a second half **41**. A second attachment end **49** is located at their termination. The first stem **25** and the second stem **27** are preferably coupled with the base member **3** by a first weld **43** and a second weld **45**, respectively. Alternatively, the first stem **25**, second stem **27**, and the base member **3** may be one unit.

The structure of the first stem **25** and the second stem **27** in two parts facilitate the manufacturing process, i.e., molding and expedites the assembly process. The first half of the first stem **35** and the first half of the second stem **39**, may use ridges (not shown) to properly align with the second half of the first stem **37** and the second half of the second stem **41**.

It is contemplated that the first half **35** and second half **37** of the first stem **25**, and the first half **39** and second half **41** of the second stem **27**, may be connected with peg members (not shown) emanating from the first half **35** of the first stem **25** and the first half **39** of the second stem **27** being received by a receiving aperture located in the second half **37** of the first stem **27** and the second half **41** of the second stem **27**. The peg members and their receiving apertures may be located one to five centimeters apart from one another in order to facilitate a firm connection between the stem halves. To further ensure attachment between the stem halves, an epoxy or similar attachment substance may be implemented. The first and second halves of the first stem **35** and the first half and second halves of the second stem **39** may be connected by a peg (now shown), located on the first half **35** of the first stem **25** and the first half **33** of the second stem **27**, and a receiving orifice that implements a locking prong (not shown), located on the second half **37** of the first stem **25** and the second half **41** of the second stem **22**.

The first stem **25** and the second stem **27**, extend in an upward direction from the upper surface of the base member **5** and turn approximately ninety degrees before ending in a first attachment end **51** at the first stem **25** and end **49** at second stem **27**. The two attachment ends **49** and **51** lie on the same axis and face each other.

In the preferred embodiment, the first attachment end **51** and the second attachment end **49** are cylindrical in shape and have four separate engaging members **52**. Each engaging member **52** has a first sliding surface **53** and a second sliding surface **55**. The engaging members **52** are separate by a gap **57** that ensures adequate flexibility when the engaging members **52** are under pressure.

The engaging members **52** are designed to interface with a pair of apertures **59** in the housing **29**. In the preferred embodiment, a first rotational aperture **59** and a second rotational aperture each have twelve sliding surfaces **61** that are adapted to accommodate the sliding surfaces **53**, **55** of the engaging members **52** (FIG. **4**). The numerous sliding surfaces **61** in the housing **29** permit the housing **29** to be positioned in small increments. A first stem face **64** and a second stem face **63** assist in guiding rotation of the housing **29** on the attachment ends **49**, **51**.

The housing **29** comprises a first half **31** and a second half **33**. The first half **31** and the second half **33** have a length ranging from two to six centimeters, a width ranging from one to six centimeters and a height ranging from two to six centimeters. In the preferred embodiment, the first half **31** and the second half **33** of the housing are connected to the first stem **25** and the second stem **27**. The first and second attachment ends **49**, **51** fit into and are rotationally held by the first and second rotational apertures **59** and **60**, in housing **29** along a rotational axis **47**. The first stem **25** and the second stem **27** create the rotational axis **47** on which the housing **29** may rotate. The rotational axis **47** lies along the symmetrical center of the first and second stem. It is contemplated that the first stem **25** and the second stem **27** will be constructed from a plastic material, such as, polycarbonate/ABS, engineered to support the weight of the housing **29** and the lamp structure that may be attached to it.

Making the structure of the housing **29**, in two parts, the first half **31** and the second half **33**, eases the manufacturing process, i.e., molding, and expedites the assembly process. The first half **31** may use ridges (not shown) to properly align with the second half **33**. It is contemplated that the second half **33** may be connected by a plurality of peg members **67** emanating from the first half **31** and engaging

a plurality of receiving apertures **69** in the second half **33**. To further ensure a permanent attachment between the first half **31** and the second half **33**, an epoxy or other similar attachment substance may be used. The first half **31** and the second half **33** may also, alternatively, be connected by a peg, located on the first half **31** and a receiving orifice that implements a locking prong, located on the second half **33**.

The first half **31** of the housing **29** is equipped with an opening **71** designed to accommodate a light structure. In the preferred embodiment, the opening **71** is circular. However, the opening may also be any other conventional geometric shape, such as a square, to facilitate attachment of a light structure as well known in the industry.

FIG. **3** is a left side elevation of the light housing **29** showing its ability to rotate three hundred and sixty degrees, as indicated by the directional arrow **65**, around a rotational axis **47** created by the first stem **25** and the second stem **27**. This ability of the housing **29** to rotate enables a user to position a light source in any of a variety of front and back positions to directly illuminate a path to an exit or the exit itself during an emergency situation.

FIG. **4** is a cross-sectional view of the engaging members **52** located on the first stem **25** and the second stem **27**. Such engaging member **52** has a first sliding surface **53** and a second sliding surface **55**, in a different plane but lying along the same circumference. The engaging members are constructed of a plastic material, such as a polycarbonate/ABS. Coupled with the gaps **57**, a flexible structure is provided. Flexibility is required to permit rotation when the engaging members **52** are positioned in the first rotational aperture **59** and the second rotational aperture **60** of the housing **29**. The gaps **57**, located between the engaging members **52** provide ample space for the members **52** to flex in reaction to the force exerted upon the members **52** by the rotational surfaces **61** of the first rotational aperture **59** and the second rotational aperture **60** when the housing **29** is being rotated.

Having illustrated and described a preferred embodiment as well as variants of this invention, it will be obvious to those skilled in the art that further changes and modifications may become apparent. Such changes and modifications are to be considered within the scope and essence of this invention.

What is claimed is:

1. A lamp support for an emergency light fixture comprising:

a first stem;

a second stem; and

a housing rotatably attached between the first stem and the second stem whereby the housing is capable of rotation 360 degrees about an axis between the first and second stem.

2. The lamp support of claim **1**, further comprising a base member having an upper side and a lower side with the first stem and the second stem being attached to the upper side of the base member.

3. The lamp support of claim **1**, further comprising a plurality of attachment ends affixed to the lower side of the base member.

4. The lamp support of claim 1 wherein the plurality of attachment ends comprise a spring finger and a snap connector to secure the mounting of the base member.

5. The lamp support of claim **1**, wherein the first stem and the second stem include a plurality of engaging members.

6. The lamp support of claim **5**, wherein each engaging member has a first and a second sliding surface.

7. The lamp support of claim **5** wherein the plurality of engaging members are separated by a gap.

8. The lamp support of claim **1**, wherein the light comprises a first rotational aperture and a second rotational aperture within which the first and second stem insert.

9. The lamp support of claim **8** wherein the first rotational aperture and the second rotational aperture contain a plurality of rotational faces that control the sliding faces on the engaging members.

10. A lamp support for an emergency light fixture, comprising:

a housing adapted for supporting a light source; and

a mounting structure rotatably connected to the housing to permit rotation of the housing about an axis determined by the mounting structure.

11. The lamp support of claim **10** wherein the housing includes an aperture that receives a part of the mounting structure and about which the housing rotates.

12. The lamp support of claim **11** wherein the housing further comprises a plurality of sliding surfaces located along a single circumference in the aperture of the housing.

13. The lamp support of claim **12** wherein the mounting structure comprises a plurality of spaced apart teeth, each having a sliding surface thereon located along a single circumference for engaging the sliding surfaces in the aperture of the housing.

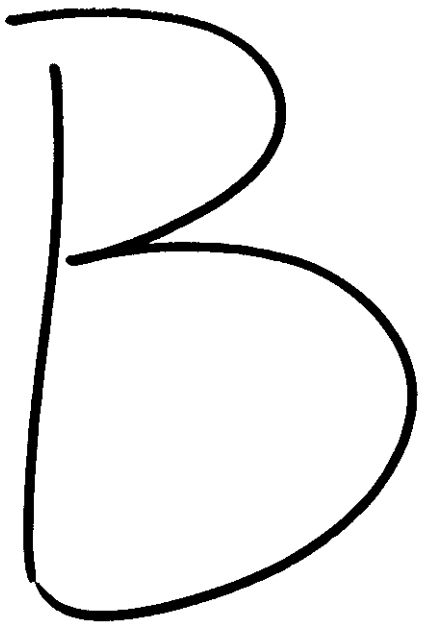
14. The lamp support of claim **13** wherein each of said teeth has a plurality of sliding surfaces thereon, all the sliding surfaces located along a single circumference.

15. The lamp support of claim **14** wherein the mounting structure comprises a first and a second stem positioned to have an end of the first stem facing an end of the second stem while lying along the same symmetrical axis, each stem having the spaced apart teeth located at the facing ends.

16. The lamp support of claim **15** further comprising a base attached to the ends of the first and second stems that do not face each other for supporting the first and second stems.

17. The lamp support of claim **16** wherein the base includes attachment fingers adapted for attaching the base to an emergency light fixture.

* * * * *



US006606808B2

(12) **United States Patent**
Katz

(10) **Patent No.: US 6,606,808 B2**
(45) **Date of Patent: Aug. 19, 2003**

(54) **EXIT SIGN WITH ROTATABLE LIGHTING HEADS**

(75) Inventor: **Jeffrey S. Katz**, Pickerington, OH (US)

(73) Assignee: **Best Lighting Products, Inc.**, Reynoldsburg, OH (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 80 days.

(21) Appl. No.: **09/813,840**

(22) Filed: **Mar. 22, 2001**

(65) **Prior Publication Data**

US 2001/0045035 A1 Nov. 29, 2001

Related U.S. Application Data

(60) Provisional application No. 60/192,620, filed on Mar. 24, 2000.

(51) **Int. Cl.**[7] **G09F 13/06**; F21V 21/29

(52) **U.S. Cl.** **40/570**; 40/546; 40/564; 362/287; 362/234

(58) **Field of Search** 40/570, 546, 580, 40/564; 362/287, 427, 812, 234, 147, 404

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,500,998	A	*	7/1924	Kuhn 40/573
2,152,844	A	*	4/1939	Hays 40/577
3,916,404	A		10/1975	Gouge
4,075,470	A	*	2/1978	Moore 362/287
4,380,792	A	*	4/1983	Terrell 362/250
4,531,114	A		7/1985	Topol et al.
4,535,391	A		8/1985	Hsiao
5,448,843	A		9/1995	Schwartz
5,599,089	A	*	2/1997	Sheu et al. 362/198
D379,373	S		5/1997	Logan et al.
5,697,175	A		12/1997	Schwartz
5,713,662	A	*	2/1998	Kira 362/427
D391,992	S		3/1998	Vosika et al.
5,797,673	A	*	8/1998	Logan et al. 362/234
5,941,630	A	*	8/1999	Finke et al. 362/371
6,059,429	A	*	5/2000	Bodell 362/287
6,142,648	A		11/2000	Logan et al.
6,193,395	B1	*	2/2001	Logan 362/285
6,309,085	B1	*	10/2001	Katz et al. 362/234

OTHER PUBLICATIONS

Lithonia Lighting: Quantum Emergency Lighting Exit Signs and Emergency Units, Form 680.181, Jun. 1999.

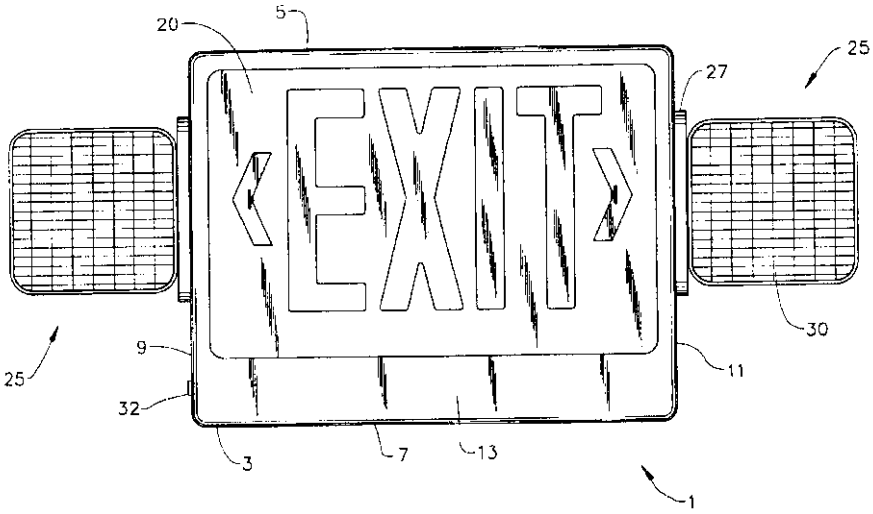
* cited by examiner

Primary Examiner—Stephen T. Gordon
Assistant Examiner—Gregory Blankenship
(74) *Attorney, Agent, or Firm*—Diederiks & Whitelaw, PLC

(57) **ABSTRACT**

An emergency exit sign includes a support assembly which permits rotation of lighting heads, about an upright axis, through an angle greater than 180°. A freely rotatable joint element is used to maintain the lighting heads, in cooperation with mating facets, in various positions without the need for mechanical fasteners. The lighting heads are also attached to a snap connector which, enables the lighting head to be shifted about an arcuate axis, as well as rotated about a still further axis which is substantially perpendicular to the upright axis.

14 Claims, 6 Drawing Sheets



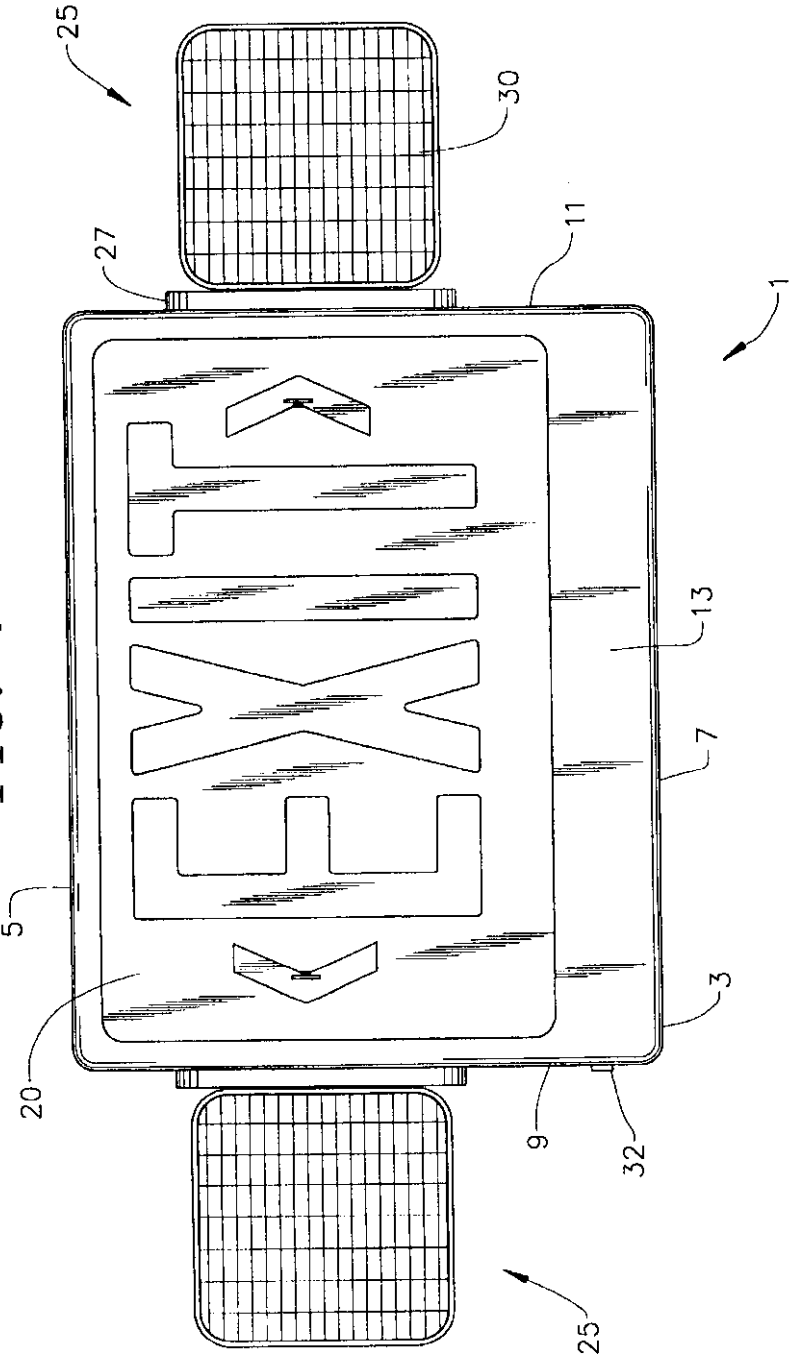


FIG. 1

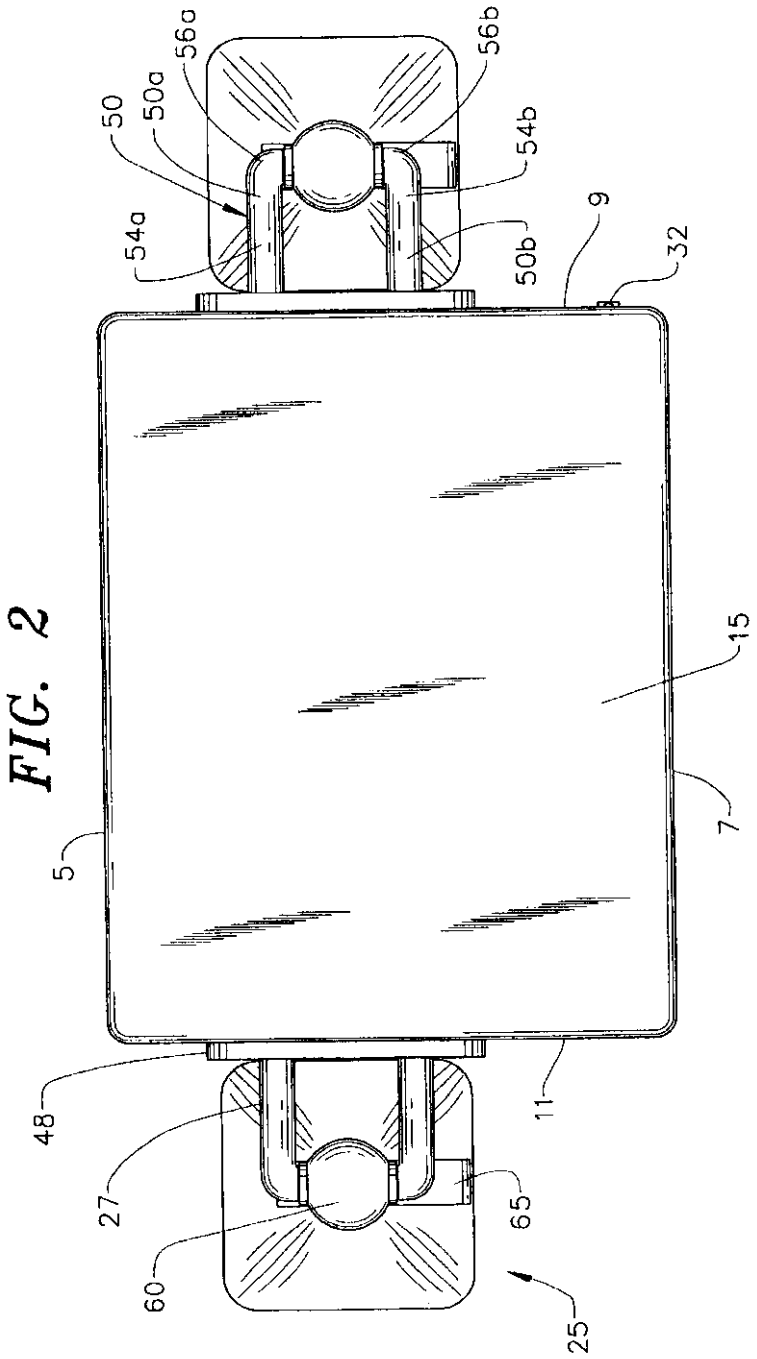


FIG. 2

FIG. 3

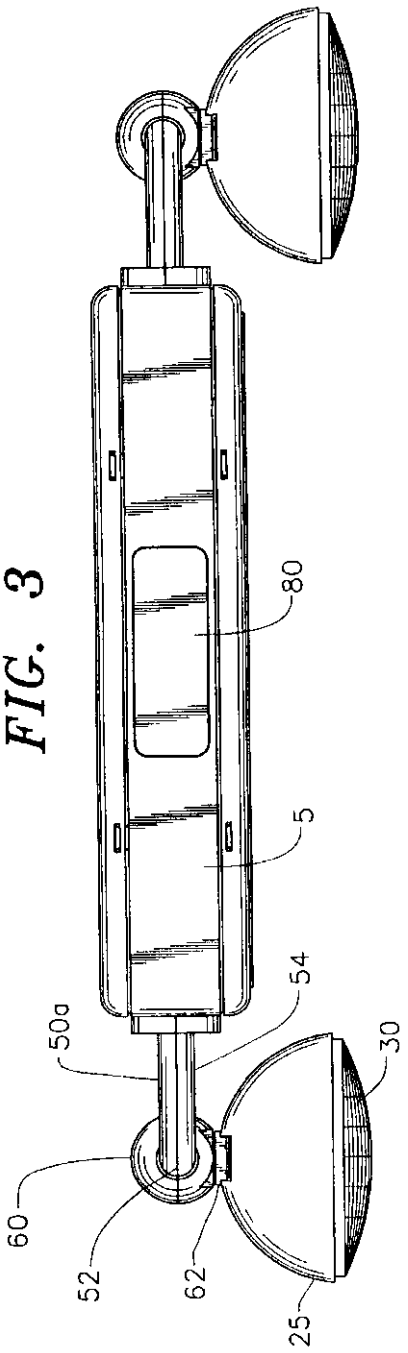


FIG. 4

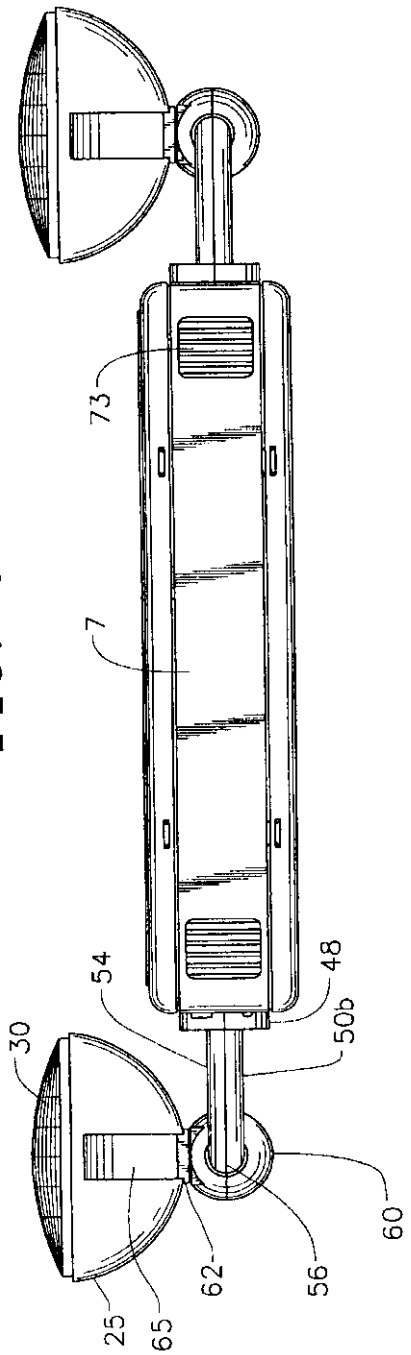


FIG. 5

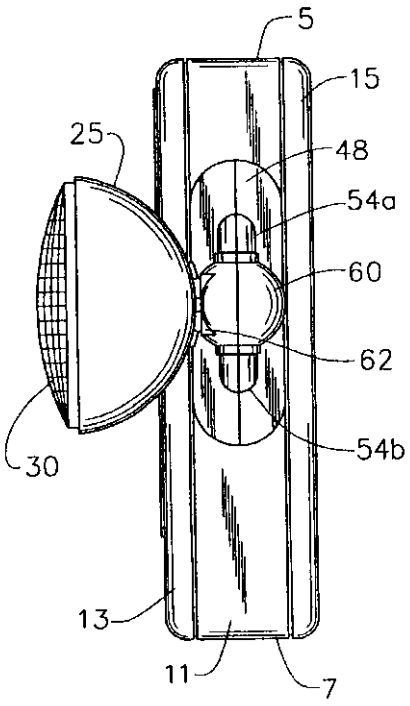


FIG. 6

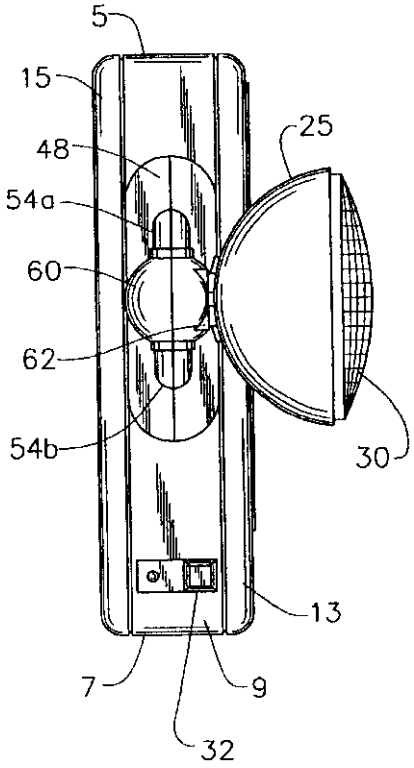


FIG. 7

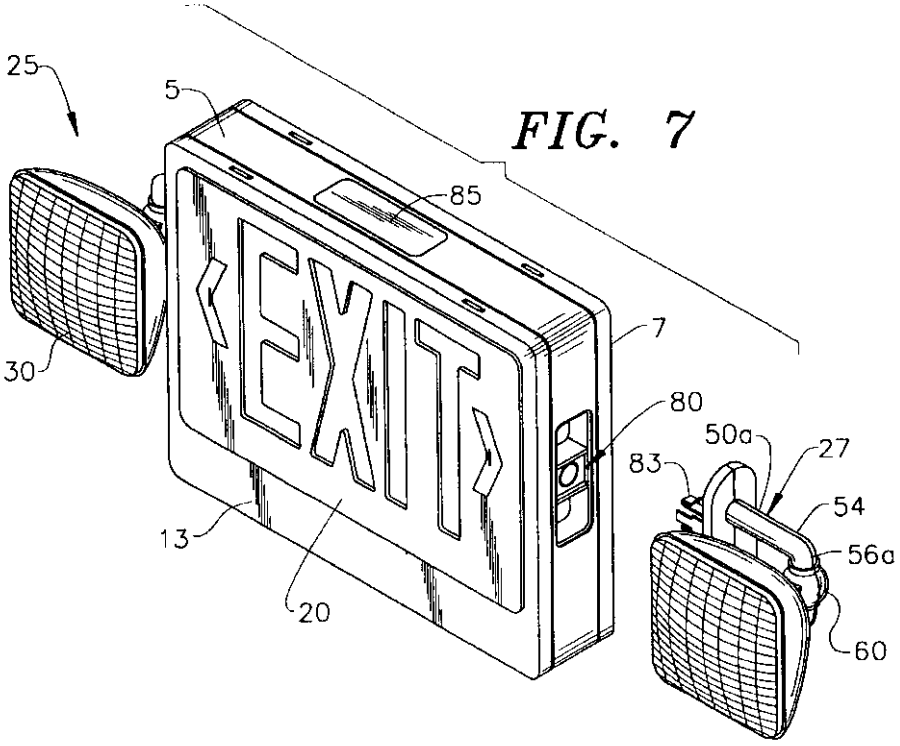


FIG. 8

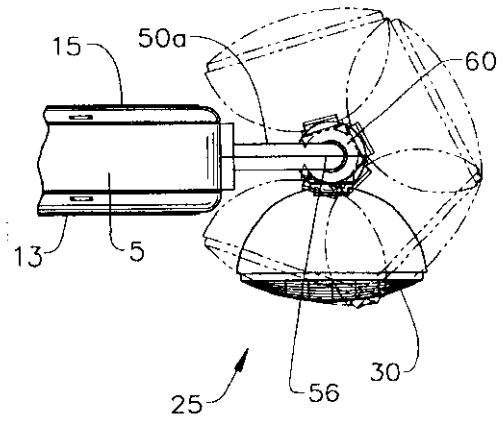


FIG. 9

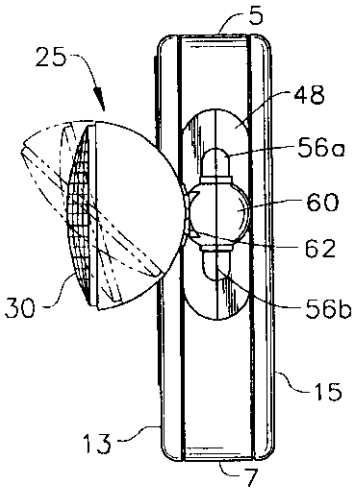


FIG. 10

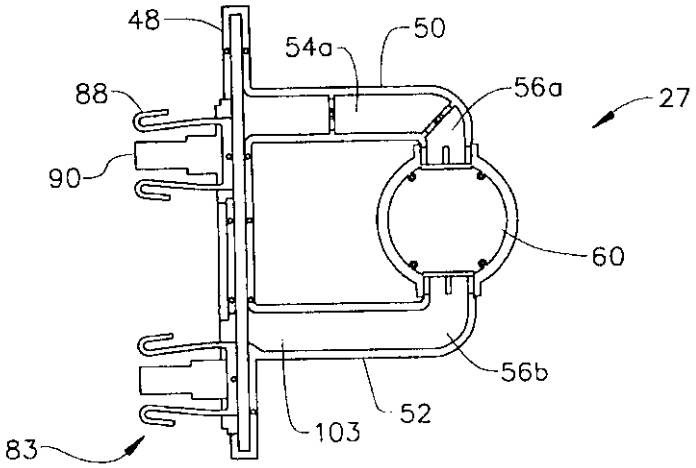
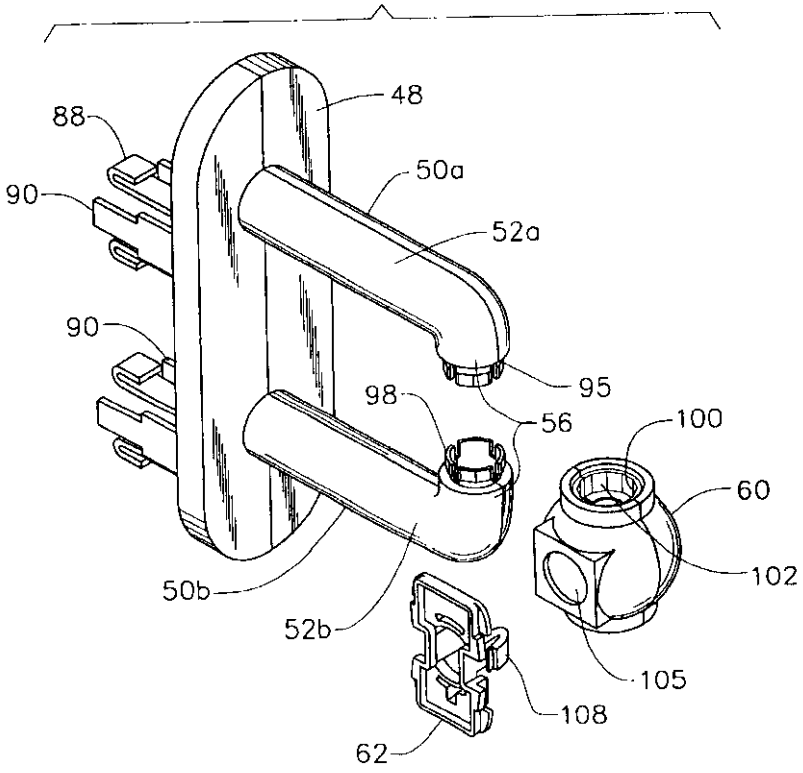

48
54a
50
88
56a
27
90
60
56b
52
103
83

FIG. 11


48
88
50a
90
52a
90
95
98
56
100
60
102
50b
52b
105
108
62

EXIT SIGN WITH ROTATABLE LIGHTING HEADS

This application claims the benefit of U.S. Provisional 60/192,620 filed Mar. 24, 2000.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention pertains to the art of exit signs and, more particularly, to an exit sign which is adapted to be mounted above a doorway and incorporates at least one lighting head that can be rotated and angled into a variety of positions relative to a housing of the exit sign.

2. Discussion of the Prior Art

Exit signs are commonly found in essentially all commercial buildings. In general, the purpose of an exit sign is to direct a person's attention to the location of a suitable building exit. To achieve this function, it is known to provide exit signs along corridors in order to lead one to an exit, as well as directly adjacent the exit itself. Typically, such exit signs are mounted on surrounding walls or suspended from a ceiling. In any case, exit signs mark the way for people leaving a building.

In the event of an emergency, such as a building fire, exit signs can play a crucial role in enabling people to safely leave the building in a timely manner. Typically, an audible fire alarm is sounded as an initial indicator of the presence for possibility of a fire. In addition, strobe lights are also often used as visual indicators in such emergency situations, especially in large scale commercial buildings such as hotels, hospitals, convention centers, large office buildings and the like. Furthermore, it is known in the art to provide auxiliary lighting heads on the housing of an exit sign in order to illuminate the area leading to and around the exit.

In accordance with the prior art, such lighting heads have either been fixed in a certain position relative to the housing of the exit sign or permitted to be adjusted to some limited extent. Often, such adjustments require the loosening of a threaded or other type of fastener, an adjustment of the lighting head and then a re-tightening of the fastener. On the other hand, there has been some proposals to provide for certain directional adjustments for the lighting heads relative to the exit housing which do not require the loosening and tightening of mechanical fasteners. However, with such known arrangements, such adjustments are either time consuming or limited in range.

Based on the above, there exists a need in the art for a versatile exit sign incorporating one or more lighting heads wherein each lighting head can be readily repositioned relative to the housing of the exit sign about numerous axes such that the most advantageous lighting configuration can be readily accomplished with minimal effort.

SUMMARY OF THE INVENTION

In accordance with the present invention, an exit sign includes a housing provided with wall portions to which one or more lighting heads are attached. In accordance with the most preferred embodiment, a pair of lighting heads are attached to spaced lateral side wall portions of the exit housing. The lighting heads are snap-fit into recessed areas formed in the housing and include a base from which project upper and lower support arms. Each support arm includes an elongated laterally extending portion which leads to a generally vertically extending portion. Each vertically extending portion has a terminal end formed with a plurality of external facets. Interposed between the support arms is a joint element including a pair of opposing aligned holes which are also, preferably, faceted.

With this arrangement, the joint element can be rotated about a substantially vertical axis relative to the support arms. During rotation, the facets of the arms and the joint element interact to define a plurality of detent positions for the joint element. A lighting head is rotatably mounted about a substantially horizontal axis to the joint element at a position defined between the upper and lower openings of the joint element. Most preferably, the joint element is provided with an additional opening that opens laterally of the element and the light head is provided with a connector which is snap-fit into the joint element. With this arrangement, the lighting head can be rotated about a substantially vertical axis defined by the support arms through an angle greater than 180° relative to the exit sign housing, while also being rotatable about a substantially horizontal axis through 360°. Electrical wires for the lighting head extend through the snap connector, into the joint element, through one of the upper and lower support arms and into the exit housing, thereby supplying power to the lighting head. To further enhance the ability to position the lighting head in a desired orientation, the head is formed with an elongated recess into which the snap connector is slidably received such that the lighting head can be angled relative to the snap connector and the joint element by shifting of the lighting head, wherein the snap connector slides within and becomes repositioned within the elongated recess. Due to the configuration of the lighting head, the recess essentially constitutes and defines an arcuate path that extends from one side of the lighting unit, approximately two thirds the way across to an opposing side of the unit.

With this configuration, the lighting heads can be maneuvered in essentially any desired position and along multiple axes. That is, the lighting head can be rotated through more than 180° about a vertical axis defined by the support arms, can be rotated about the substantially horizontal axis through the connection of the lighting head to the joint element and the lighting head can be repositioned relative to each of the snap connector, joint element and support arms through the interconnection between the snap connector and the lighting head.

Additional objects, features and advantages of the present invention would be readily apparent to one of ordinary skill in the art, particularly when taken in conjunction with the drawings presented herewith.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a front elevational view of an exit sign, incorporating a pair of laterally spaced adjustable lighting heads, constructed in accordance with the present invention;

FIG. **2** is a rear elevational view of the exit sign of FIG. **1**;

FIG. **3** is a top plan view of the exit sign;

FIG. **4** is a bottom plan view of the exit sign;

FIG. **5** is a right side view of the exit sign;

FIG. **6** is a left side view of the exit sign;

FIG. **7** is a perspective view of the exit sign of FIGS. **1–6** with one of the rotatable lighting heads shown exploded from the main housing of the exit sign;

FIG. **8** illustrates the repositioning of one of the lighting heads about one axis;

FIG. **9** illustrates the manner in which the angle of the lighting head with respect to a horizontal axis can be adjusted;

FIG. **10** is a cross-sectional view of a mounting assembly used between the housing of the exit sign and one of the lighting heads; and

FIG. **11** is an exploded view of an overall support assembly used in interconnecting one lighting head to the exit sign housing.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

With initial reference to FIG. **1**, an exit sign constructed in accordance with the invention is generally indicated at **1**. Exit sign **1** includes a housing **3** having a top **5**, a bottom **7**, a left lateral side **9**, a right lateral side **11**, a substantially planar front surface **13** and a planar rear surface **15** (shown in FIG. **2**). In the preferred embodiment, first surface **13** exhibits letters/symbols **20**. Although letters/symbols **20** are shown in FIG. **1** expressing the word EXIT, with chevrons on either side of this term, it is considered within the scope of this invention that any combination of letters or symbols may be expressed on front surface **13** or, in fact, rear surface **15**.

A lighting system (not shown) is located within housing **3** and may be constituted by any conventional illumination system to light up letters/symbols **20**. For example, the lighting system may simply include a single light bulb centrally located within housing **3** to shine through partially transparent or translucent letters/symbols **20**. In an alternative, the lighting system may include a separate incandescent light bulb for each of the individual symbols of letters/symbols **20**. The lighting system may also include a series of LEDs forming the individual symbols of letters/symbols **20**, as commonly known in the art. In a manner also known in the art, exit sign **1** is adapted to be connected to a primary power source (not shown), e.g. AC, and a secondary power source, e.g. an internal battery, for when the primary power source fails. However, the power sources and specific lighting system within housing **3** do not form part of the present invention.

FIG. **1** also shows two lighting heads **25** mounted to housing **3**. Specifically, each lighting head **25** is affixed to a support assembly **27**, which is attached to a respective one of lateral sides **9** and **11** of housing **3**, as will be more fully described below with reference to FIGS. **2–11**. Each lighting head **25** is shown as including a lens **30**, behind which is preferably located a typical flood light bulb used in emergency lighting systems. Again, any conventional lighting apparatus may be used. A button **32** protrudes from left lateral side **9** and is electrically connected to a fuse or other circuitry used with exit side **1**.

FIG. **2** shows exit sign **1** with rear surface **15** exposed. Because letters/symbols **20** are only on front surface **13**, letters/symbols **20** are not shown in FIG. **2**. However, as indicated above, it is considered within the scope of this invention to incorporate letters/symbols in rear surface **15** as well. Although two support assemblies **27** are shown to extend from housing **3**, each support assembly **27** is preferably identical in construction and, as such, a detailed description of one of support assembly **27** will be provided below and it to be understood that each support assembly has the equivalent structure.

Support assembly **27** is used to connect a respective lighting head **25** to housing **3**. A mounting flange **48** of support assembly abuts right lateral side **9** and functions, in conjunction with structure to be later defined, to secure support assembly **27** to housing **3**. Mounting flange **48** is essentially a planar member from which extends a support

arm assembly **50**. In a preferred embodiment, an upper support arm **50***a* and a lower support arm **50***b* are provided. Each support arm **50***a*, **50***b* includes a respective laterally extending portion **54***a*, **54***b* which begins at mounting flange **48** and proceeds perpendicularly for a distance until forming a vertically extending portion **56***a*, **56***b*. Because the angle formed between laterally extending portions **54***a*, **54***b* and vertically extending portions **56***a*, **56***b* are right angles, vertically extending portions **56***a*, **56***b* are arranged parallel to mounting flange **48**. As shown, vertically extending portions **56***a*, **56***b* extend from laterally extending portions **54***a*, **54***b* and point towards each other. Specifically, vertically extending portion **56***a* begins at the end of laterally extending portion **54***a*, opposite mounting flange **48** and extends toward opposite vertically extending portion **56***b*. Similarly, vertically extending portion **56***b* begins at the end of laterally extending portion **54***b*, opposite mounting flange **48**, and extends toward opposite vertically extending portion **56***a*.

A joint element **60** connects upper support arm **50***a*, lower support arm **50***b* and lighting head **25**. A snap connector **62** (shown in FIGS. **3–6** and **11**) is inserted into an elongated recess **65** in lighting head **25**. Because the surface of lighting head **25** is curved, elongated recess **25** defines an arcuate path that extends from one side of lighting head **25**, approximately two-thirds the way across to an opposing side of lighting head **25**. The combination of snap connector **62** in elongated recess **65** and joint element **60** linking upper support arm **50***a* with lower support arm **50***b* permits rotation of lighting head **25** into a variety positions, as will be more fully described below. Additionally, the construction of snap connector **62** allows for lighting head **25** to be rotated in a plane defined by lens **30**.

FIGS. **3** and **4** show exit sign **1** from a top plan view and a bottom plan view, respectively, with lighting heads **25** in identical positions. Indicated at **73** is a vent, for allowing air to enter housing **3** to cool the included lighting system. Snap connector **62** can also be seen inside elongated recess **65**. The configuration of elongated recess **65** within lighting head **25** is more clearly shown in FIG. **4** as forming its arcuate path for adjustment of lighting head **25**.

FIGS. **5** and **6** are side views of exit sign **1** with lighting head **25** in identical positions. Mounting flanges **48** are shown as oval planar members abutting left lateral side **9** and right lateral side **11** to ensure proper mounting of support assembly **27** to housing **3**. Elongated recess **65** cannot be seen in these figures since recess **65** is on the surface of each lighting head **25** which points downward, and hence, is obscured from view. Button **32** is also more clearly depicted in FIG. **6**. Button **32** is of a conventional design used in an emergency exit sign and, as a result, includes a depressible member for testing exit sign **1**, in addition to a light for indicating various operational states of exit sign **1**. However, the structure, configuration and operation of button **32** is not considered part of the present invention.

FIG. **7** is a partial exploded view of exit sign **1**. In particular, light head **25** is removed from housing **3**, to expose mounting recesses **80**. A plurality of flexible insert flanges **83** are provided on mounting flange **48** which, when inserted into mounting recesses **80**, lock support assembly **27** to housing **3**. An identical set of mounting recesses **80** and insert flanges **83** are located on obscured lateral side **9** and support assembly **27**, respectively. In a preferred embodiment, an additional mounting arrangement is located on top **5** of housing **3** to allow for the optional placement of a third support assembly **27** and a third lighting head **25** if desired. In the preferred embodiment shown, however, a

cover **85** is provided because only two support assemblies **27** and lighting heads **25** are used.

FIGS. **8** and **9** show the potential for repositioning of each lighting head **25** along different axes. Specifically, lighting head **25** can be rotated about a first upright axis defined by support assembly **27** and, by moving head **25** relative to snap connector **62**, lighting head **25** can be moved along another axis. The construction of support assembly **27** and joint element **60** are specifically designed to allow rotation of lighting head **25** through an angle greater than 180° (preferably about 220°–240°), as indicated by FIG. **8**. This is accomplished, in part, by extending the length of laterally extending portions **54***a*, **54***b* of support arms **50***a*, **50***b*. By doing so, rotation of lighting head **25** is only limited by housing **3**. Of course, longer and wider spaced support arms **50***a*, **50***b* could enable complete 360° rotation. However, as wiring for lighting head **25** is routed through one of support arms **50***a*, **50***b*, as will be discussed further below, complete rotation is not preferred. In any event, the solid lines indicate the position of lighting head **25** as shown in FIGS. **1**–**7**, while the dotted lines are included to indicate a small sample of possible positions into which lighting head **25** may be rotated by joint element **60**.

FIG. **9** shows the adjustment of lighting head **25** along the second axis. By shifting lighting head **25** relative to snap connector **62**, lighting head **25** is moved along an arcuate path defined by elongated recess **65**. Just as with FIG. **8**, the solid lines indicate the position of lighting head **25** as shown in FIGS. **1**–**7**, while the dotted lines are included to indicate a small sample of possible angular positions into which lighting head **25** may be shifted.

FIGS. **10** and **11** detail the preferred structure of support assembly **27**. On one side of mounting flange **48** are a pair of insert flanges **83**. Each set of insert flanges **83** includes alternating hooks **88** and tabs **90**, spaced apart and arranged in the general shape of a square. When support assembly **27** is completely assembled and joined to housing **3**, hooks **88** and tabs **90** are inserted into mounting recess **80**. Mounting recess **80** is constructed such that hooks **88** mate with part of mounting recesses **80**, thereby preventing ready removal of insert flanges **83** from mounting recesses **80**. Mounting flange **48** prevents insert flanges **83** from being inserted too far into housing **3**. Therefore, the combination of hooks **88** and mounting flange **48** secures support assembly **27** to housing **3**.

Support arms **50***a*, **50***b* are hollow and terminate adjacent a respective end **95** in external facets **98**. Joint element **60** includes an aligned hole **100** with internal facets **102**. When joint element **60** is placed between support arms **50***a*, **50***b*, a unitary bore or tunnel **103** is formed from one support arm **50**a through joint element **60** to opposite support arm **50***b*. External facets **98** of each vertically extending portion **56***a*, **56***b* mate with internal facets **102** of joint element **60** to define a plurality of radial positions for joint element **60** with respect to housing **3**. Due to the interaction of external facets **98** and internal facets **102**, a freely rotatable joint is formed. However, this freely rotatable junction allows for a variety of supported positions for lighting head **25** without the need for loosening and tightening of mechanical fasteners to maintain relative positions. In addition, detents are defined by the mating of facets **98** and **102** to retain lighting head **25** in a desired position.

Joint element **60** also includes a lateral opening **105** which mates with snap connector **62**. Snap connector **62** includes prongs **108** which are snap-fittingly inserted into lateral opening **105** to secure snap connector **62** to joint element **60** while permitting relative rotation. Therefore, lighting head **25** can rotate relative to joint element **60**. Because snap connector **62** is provided with a central aperture, wires (not shown) can be routed from lighting head **25** through snap connector **62**, joint element **60**, one of support arms **50***a*, **50***b*, mounting flange **48** to housing **3**. Mounting recess **80** may optionally be formed with an electrical socket (not shown), adapted to receive such wires.

Although described with reference to preferred embodiments, it should readily understood that various changes and/or modifications could be made to the invention without departing from the spirit thereof. For example, it is contemplated to provide only a single support arm **50***a* or **50***b*, to which lighting head **25** is connected. Additionally, the illumination source within lighting head **25** may be a halogen lamp or any other light source, instead of a traditional incandescent light bulb. Finally, mounting flange **48** may include a quick-connect plug, adapted to be inserted into a socket in proximity to mounting recess **80**, to electrically connect the wires extending from lighting head **25** to housing **3**. It must also be noted that relative terms such as top, bottom, left and right are included for ease of understanding, and are not to be considered as limiting with regards to the above-described invention. Instead, the invention is only intended to be limited by the scope of the following claims.

I claim:

1. An exit sign comprising:

a housing having a front face and a rear face with a peripheral edge therebetween, said housing being adapted to receive a lighting system including an illumination source and a power source;

symbols located on said front face adapted to be illuminated by the lighting system;

a support assembly mounted to said peripheral edge, said support assembly including a support arm defining a first axis;

a freely rotatable lighting head supported by said support arm for movement to any one of a plurality of selectable, discreet positions through an angle greater than 180° about the first axis; and

means for enabling sliding adjustment of said lighting head relative to said support arm.

2. The exit sign according to claim **1**, wherein said peripheral edge includes at least one mounting recess into which a portion of said support assembly projects.

3. The exit sign according to claim **2**, wherein said support assembly includes means for snap-fittingly connecting the support assembly to the housing.

4. An exit sign comprising:

a housing having a front face and a rear face with a peripheral edge therebetween, said housing being adapted to receive a lighting system including an illumination source and a power source;

symbols located on said front face adapted to be illuminated by the lighting system;

a support assembly mounted to said peripheral edge, said support assembly including a support arm defining a first axis;

a freely rotatable lighting head supported by said support arm for movement to any one of a plurality of selectable, discreet positions through an angle greater than 180° about the first axis;

a joint element attached to the support assembly for rotation about the first axis; and

a connector attached to the joint element for rotation about a second axis, said lighting head being attached to the connector such that the lighting head is supported by the support arm through the joint element and the connector, wherein said lighting head is provided with an elongated recess into which the connector projects such that the lighting head is slidable relative to the connector.

5. The exit sign according to claim **4**, wherein the connector is snap-fittingly attached to the joint element.

6. The exit sign according to claim **4**, wherein said second axis of rotation is substantially perpendicular to the first axis.

7. The exit sign according to claim **4**, wherein said support arm includes a terminal end, remote from the housing, provided with a first set of facets, and the joint element is provided with a second set of facets, wherein the first and second sets of facets mate to define the plurality of selectable, discreet positions.

8. The exit sign according to claim **7**, wherein the first set of facets are provided on an external surface portion of said support arm and the second set of facets are provided on an internal surface portion of said joint element.

9. The exit sign according to claim **4**, wherein said lighting head includes a curved surface, said elongated recess extending across a substantial portion of said curved surface such that movement of said lighting head relative to said connector constitutes rotation of said lighting head about a third axis.

10. The exit sign according to claim **4**, wherein said support arm, said joint element and said connector collectively define a tunnel from said housing to said lighting head, said tunnel being adapted to receive wires extending from said lighting head to said housing.

11. An exit sign comprising:

a housing having a front face and a rear face with a peripheral edge therebetween, said housing being adapted to receive a lighting system including an illumination source and a power source;

symbols located on said front face adapted to be illuminated by the lighting system;

a support assembly mounted to said peripheral edge, said support assembly including a support arm defining a first axis;

a lighting head; and

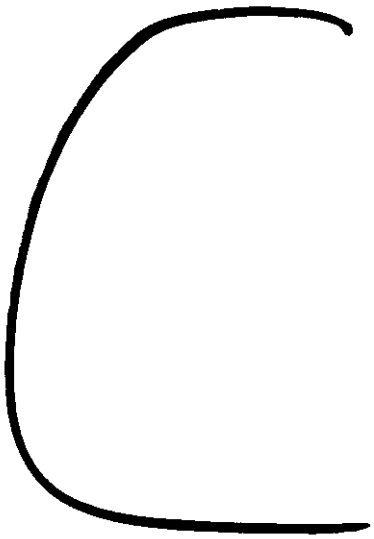
means for attaching the lighting head to the support assembly for rotation about first, second and third distinct axes, while permitting adjustment of said lighting head about the first axis through an angle greater than 180°, wherein said attaching means comprises a joint element attached to the support assembly for rotation about the first axis and a connector attached to the joint element for rotation about the second axis, said lighting head being directly attached to the connector for movement about the third axis, wherein said lighting head is provided with an elongated recess into which the connector projects such that the lighting head is slidable relative to the connector.

12. The exit sign according to claim **11**, wherein said peripheral edge includes at least one mounting recess into which a portion of said support assembly projects.

13. The exit sign according to claim **11**, wherein said support arm includes a terminal end, remote from the housing, provided with a first set of facets, and the joint element is provided with a second set of facets, wherein the first and second sets of facets mate to define a plurality of selectable, discreet positions for said lighting head.

14. The exit sign according to claim **11**, wherein said support arm, said joint element and said connector collectively define a tunnel from said housing to said lighting head, said tunnel being adapted to receive wires extending from said lighting head to said housing.

* * * * *



US00D440336S

(12) **United States Design Patent** (10) **Patent No.:** **US D440,336 S**
Katz et al. (45) **Date of Patent:** ** **Apr. 10, 2001**

(54) **LAMP SUPPORT FOR EMERGENCY LIGHT FIXTURE**

(75) Inventors: **Albert Alvin Katz**; **Richard Melbourne Haughton**, both of Newport Beach, CA (US)

(73) Assignee: **Best Lighting Products, Inc.**, Santa Ana, CA (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/120,658**

(22) Filed: **Mar. 23, 2000**

(51) **LOC (7) Cl.** **26-05**
(52) **U.S. Cl.** **D26/61**; D26/140
(58) **Field of Search** D26/60–66; 362/269, 362/275, 277, 278, 281, 283, 285, 327, 427, 428, 430, 413, 153.1, 153, 431; D10/104, 106, 111, 114, 115, 140

(56) **References Cited**

U.S. PATENT DOCUMENTS

D. 204,015	*	3/1966	Ashley	D10/114
D. 350,408	*	9/1994	Leigh et al.	D26/63
D. 372,550	*	8/1996	Stultz	D26/63
2,883,646	*	4/1959	Worsham	340/930
3,032,641	*	5/1962	Deputy	D10/114
4,841,278	*	6/1989	Tezuka et al.	340/908
5,075,834	*	12/1991	Puglisi	362/153.1
5,230,559	*	7/1993	Porter et al.	362/153.1

* cited by examiner

Primary Examiner—Susan J. Lucas
(74) *Attorney, Agent, or Firm*—Price and Gess

(57) **CLAIM**

The ornamental design for the lamp support for emergency light fixture, as shown and described.

DESCRIPTION

FIG. **1** is a perspective view of the lamp support for emergency light fixture;
FIG. **2** is a front elevational view of the lamp support for emergency light fixture;
FIG. **3** is a left side elevational view, the right side being a mirror image thereof of the lamp support for emergency light fixture;
FIG. **4** is a top plan view of the lamp support for emergency light fixture;
FIG. **5** is a bottom plan view of the lamp support for emergency light fixture; and,
FIG. **6** is a rear elevational view of the lamp support for emergency light fixture.

1 Claim, 3 Drawing Sheets

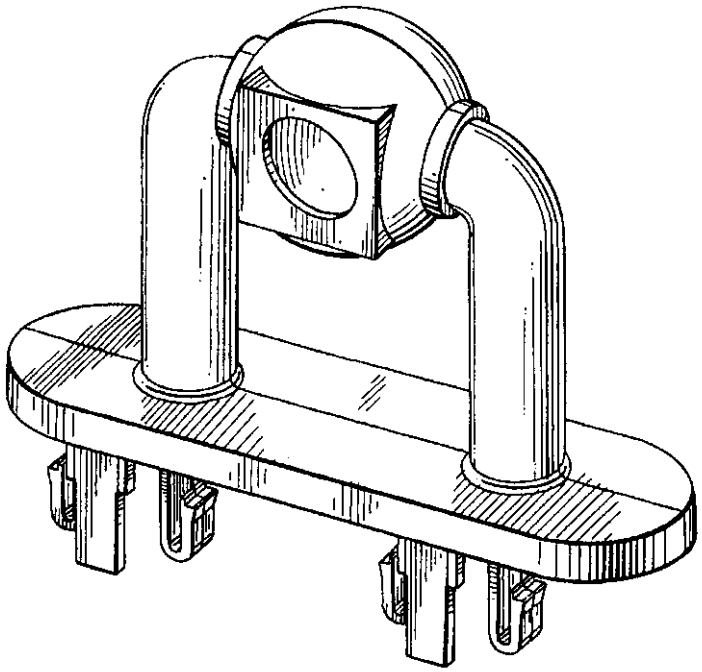


FIG. 1

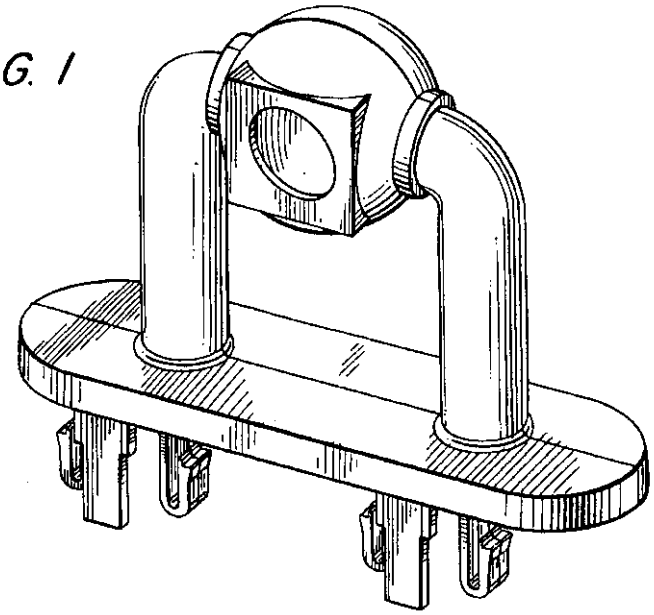


FIG. 2

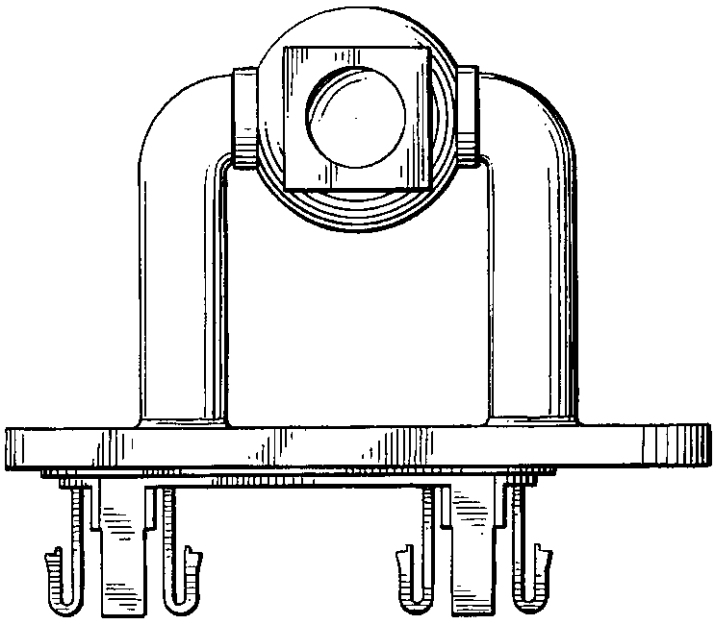


FIG. 3

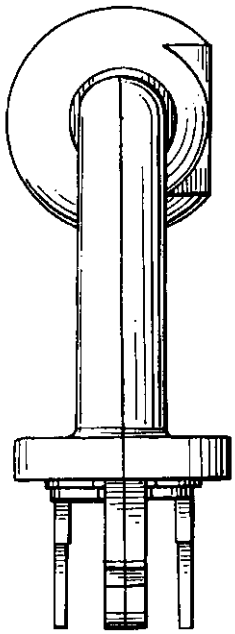


FIG. 4

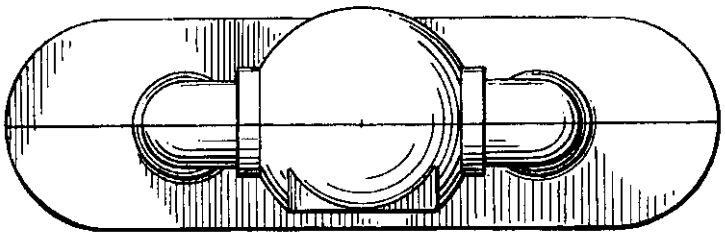


FIG. 5

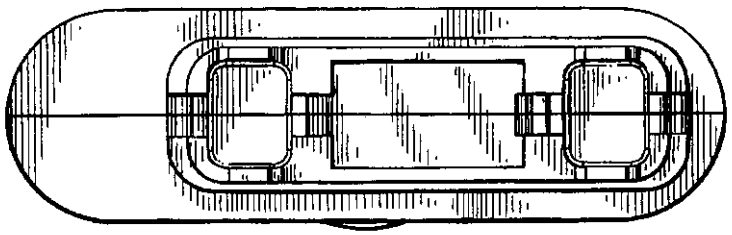
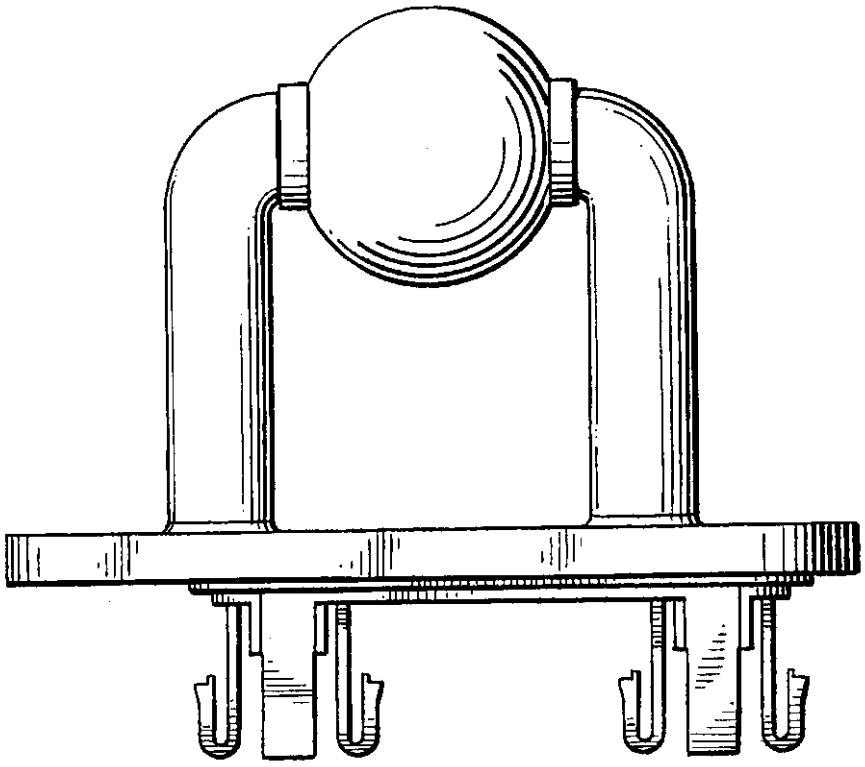


FIG. 6



JS 44 (Rev. 11/04)

CIVIL COVER SHEET

County in which this action arose OAKLAND

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON THE REVERSE OF THE FORM.)

I. (a) PLAINTIFFS

BEST LIGHTING PRODUCTS, INC.,
an Ohio corporation

(b) County of Residence of First Listed Plaintiff LICKING COUNTY, OHIO
(EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorney's (Firm Name, Address, and Telephone Number)
RICHARD W. HOFFMANN (P42352) Email: hoffmann@reising.com
Reising Ethington Barnes Kisselle PC, 201 W. Big Beaver Rd, Ste 400, Troy, MI 48084
Telephone: 248-689-3500 Facsimile: 248-689-4071

DEFENDANTS

CONTRAILS, LLC d/b/a HD LIGHTING, a Washington limited liabity company

County of Residence of First Listed Defendant
(IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE LAND INVOLVED.

Attorneys (If Known)

II. BASIS OF JURISDICTION (Select One Box Only)

- ☐ 1 U.S. Government Plaintiff
- ☑ 3 Federal Question (U.S. Government Not a Party)
- ☐ 2 U.S. Government Defendant
- ☐ 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Select One Box for Plaintiff and One Box for Defendant)

(For Diversity Cases Only)

	PTF	DEF		PTF	DEF
Citizen of This State	☐ 1	☐ 1	Incorporated *or* Principal Place of Business In This State	☐ 4	☐ 4
Citizen of Another State	☐ 2	☐ 2	Incorporated *and* Principal Place of Business In Another State	☐ 5	☐ 5
Citizen or Subject of a Foreign Country	☐ 3	☐ 3	Foreign Nation	☐ 6	☐ 6

IV. NATURE OF SUIT (Select One Box Only)

CONTRACT
- ☐ 110 Insurance
- ☐ 120 Marine
- ☐ 130 Miller Act
- ☐ 140 Negotiable Instrument
- ☐ 150 Recovery of Overpayment & Enforcement of Judgment
- ☐ 151 Medicare Act
- ☐ 152 Recovery of Defaulted Student Loans (Excl. Veterans)
- ☐ 153 Recovery of Overpayment of Veteran's Benefits
- ☐ 160 Stockholders' Suits
- ☐ 190 Other Contract
- ☐ 195 Contract Product Liability
- ☐ 196 Franchise

REAL PROPERTY
- ☐ 210 Land Condemnation
- ☐ 220 Foreclosure
- ☐ 230 Rent Lease & Ejectment
- ☐ 240 Torts to Land
- ☐ 245 Tort Product Liability
- ☐ 290 All Other Real Property

TORTS

PERSONAL INJURY
- ☐ 310 Airplane
- ☐ 315 Airplane Product Liability
- ☐ 320 Assault, Libel & Slander
- ☐ 330 Federal Employers' Liability
- ☐ 340 Marine
- ☐ 345 Marine Product Liability
- ☐ 350 Motor Vehicle
- ☐ 355 Motor Vehicle Product Liability
- ☐ 360 Other Personal Injury

PERSONAL INJURY
- ☐ 362 Personal Injury - Med. Malpractice
- ☐ 365 Personal Injury - Product Liability
- ☐ 368 Asbestos Personal Injury Product Liability

PERSONAL PROPERTY
- ☐ 370 Other Fraud
- ☐ 371 Truth in Lending
- ☐ 380 Other Personal Property Damage
- ☐ 385 Property Damage Product Liability

CIVIL RIGHTS
- ☐ 441 Voting
- ☐ 442 Employment
- ☐ 443 Housing/ Accommodations
- ☐ 444 Welfare
- ☐ 445 Amer. w/Disabilities - Employment
- ☐ 446 Amer. w/Disabilities - Other
- ☐ 440 Other Civil Rights

PRISONER PETITIONS
- ☐ 510 Motions to Vacate Sentence

Habeas Corpus:
- ☐ 530 General
- ☐ 535 Death Penalty
- ☐ 540 Mandamus & Other
- ☐ 550 Civil Rights
- ☐ 555 Prison Condition

FORFEITURE/PENALTY
- ☐ 610 Agriculture
- ☐ 620 Other Food & Drug
- ☐ 625 Drug Related Seizure of Property 21 USC 881
- ☐ 630 Liquor Laws
- ☐ 640 R.R. & Truck
- ☐ 650 Airline Regs.
- ☐ 660 Occupational Safety/Health
- ☐ 690 Other

LABOR
- ☐ 710 Fair Labor Standards Act
- ☐ 720 Labor/Mgmt. Relations
- ☐ 730 Labor/Mgmt.Reporting & Disclosure Act
- ☐ 740 Railway Labor Act
- ☐ 790 Other Labor Litigation
- ☐ 791 Empl. Ret. Inc. Security Act

BANKRUPTCY
- ☐ 422 Appeal 28 USC 158
- ☐ 423 Withdrawal 28 USC 157

PROPERTY RIGHTS
- ☐ 820 Copyrights
- ☑ 830 Patent
- ☐ 840 Trademark

SOCIAL SECURITY
- ☐ 861 HIA (1395ff)
- ☐ 862 Black Lung (923)
- ☐ 863 DIWC/DIWW (405(g))
- ☐ 864 SSID Title XVI
- ☐ 865 RSI (405(g))

FEDERAL TAX SUITS
- ☐ 870 Taxes (U.S. Plaintiff or Defendant)
- ☐ 871 IRS—Third Party 26 USC 7609

OTHER STATUTES
- ☐ 400 State Reapportionment
- ☐ 410 Antitrust
- ☐ 430 Banks and Banking
- ☐ 450 Commerce
- ☐ 460 Deportation
- ☐ 470 Racketeer Influenced and Corrupt Organizations
- ☐ 480 Consumer Credit
- ☐ 490 Cable/Sat TV
- ☐ 810 Selective Service
- ☐ 850 Securities/Commodities/ Exchange
- ☐ 875 Customer Challenge 12 USC 3410
- ☐ 890 Other Statutory Actions
- ☐ 891 Agricultural Acts
- ☐ 892 Economic Stabilization Act
- ☐ 893 Environmental Matters
- ☐ 894 Energy Allocation Act
- ☐ 895 Freedom of Information Act
- ☐ 900 Appeal of Fee Determination Under Access to Justice
- ☐ 950 Constitutionality of State Statutes

V. ORIGIN (Select One Box Only)

☑ 1 Original Proceeding ☐ 2 Removed from State Court ☐ 3 Remanded from Appellate Court ☐ 4 Reinstated or Reopened ☐ 5 Transferred from another district (specify) ☐ 6 Multidistrict Litigation ☐ 7 Appeal to District Judge from Magistrate Judgment

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing **(Do not cite jurisdictional statutes unless diversity)**:
35 U.S.C. 1, et seq

Brief description of cause:
Patent Infringement under the Patent Laws of the United States

VII. REQUESTED IN COMPLAINT:

☐ CHECK IF THIS IS A CLASS ACTION UNDER F.R.C.P. 23

DEMAND $

CHECK YES only if demanded in complaint:
JURY DEMAND: ☑ Yes ☐ No

VIII. RELATED CASE(S) IF ANY

(See instructions): JUDGE DOCKET NUMBER

DATE
January 22, 2008

SIGNATURE OF ATTORNEY OF RECORD

FOR OFFICE USE ONLY

RECEIPT # AMOUNT APPLYING IFP JUDGE MAG. JUDGE

PURSUANT TO LOCAL RULE 83.11

1. Is this a case that has been previously dismissed?

☐ Yes
☑ No

If yes, give the following information:

Court: _____

Case No.: _____

Judge: _____

2. Other than stated above, are there any pending or previously discontinued or dismissed companion cases in this or any other court, including state court? (Companion cases are matters in which it appears substantially similar evidence will be offered or the same or related parties are present and the cases arise out of the same transaction or occurrence.)

☐ Yes
☑ No

If yes, give the following information:

Court: _____

Case No.: _____

Judge: _____

Notes :