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(54) **A lamp, such as a table or floor lamp.**

(57) A lamp (1), such as a table or floor lamp (1), comprises a base member (3) and an electric wiring (9) associated with an electric light source. The base member (3) comprises at least one and preferably three conical, hollow, substantially frustoconical members (5, 6, 7) and a dome-shaped member (12), whereby the members (5, 6, 7) are releasably interconnected and matching in pairs. Means (20, 21, 22, 23, 24) are provided for keeping together the members (5, 6, 7, 12).

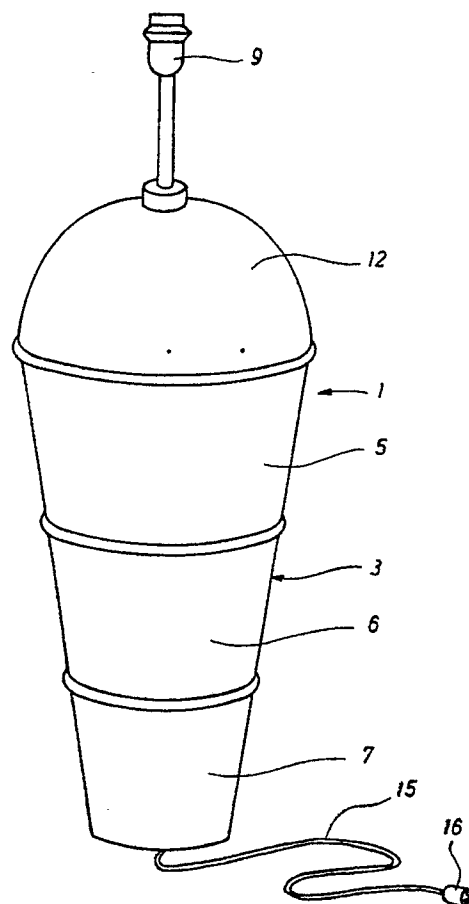


Fig.1

A lamp, such as a table or floor lamp

The invention relates to a lamp, such as a table or floor lamp, comprising a base member and an electric wiring associated with an electric light source.

German Offenlegungsschrift No. 24 41 193 discloses a lamp, where the base member comprises variously shaped and variously coloured structure members interconnectable in various ways. These structure members may be made of plastics, wood, glass, ceramics or metal. As the members are mutually replaceable, it is possible to achieve a base member of a varying appearance by a varying combination of the structure members. The lamp is provided with a socket, a switch and a terminal block, said three members rendering it possible to build and alter the lamp.

The object of the invention is to provide a lamp which during the transport to the using site is more compact and easier to pack than previously known, and where possible vulnerable members, such as the socket and the tube for the lamp, are protected in the best possible manner, and further where the completely mounted lamp is reasonably reliable. A further object of the invention is to provide a lamp which is easy to assemble in a specific manner.

The lamp according to the invention is characterised in that the base member comprises at least one and preferably three conical, hollow, substantially frustoconical members and a dome-shaped member, whereby the members are releasably interconnected and matching in pairs, and that means are provided for keeping together the members. As a result, the relatively few assembling parts can be stored inside one another during the transport. Furthermore, the assembling parts can in fact only be assembled in one manner when they reach the using site, said assembling manner providing a rigid structure. The appearance of the rigid structure does not reflect the fact that it is assembled of several individual parts.

By situating the dome-shaped member atop the largest frustoconical member, which in turn is placed atop the second largest frustoconical member in turn placed atop the third largest frustoconical member, and by at least the two middle frustoconical members being substantially shell-shaped, and by the base member being frustoconical such that the smallest cross section is situated farthest from the light source, it is ensured that the individual parts can only be assembled in one way, and that said parts can be safely arranged inside one another during the transport.

According to the invention, the dome-shaped member and the frustoconical members may be interconnected in one or more of the following

assembling ways: snap-action, bayonet locking and/or by means of threads, whereby a reliable and assembled structure is achieved.

Moreover according to the invention the lowermost member may be shaped as a pot comprising at least one opening for a conduit, said opening being of a size exactly allowing insertion of a plug. The resulting lowermost frustoconical member is provided with such a suitable strength that the periphery is not disfigured at the same time as a conduit is allowed to pass out of the lamp.

Moreover according to the invention the entire electric wiring may be mounted on the dome-shaped member, whereby the resulting electric wiring can be reliably carried out.

According to the invention the female member of the uppermost junction may be situated on the dome-shaped member, and the male member of said uppermost junction may be situated on the uppermost frustoconical member, and the female member of the middle junction may be situated on the middle frustoconical member, and the male member of said middle junction may be situated on the uppermost frustoconical member, and the female member of the lowermost junction may be situated on the lowermost frustoconical member, and the male member of said lowermost junction may be situated on the middle frustoconical member. In this manner the individual assembling members cannot damage one another during the transport.

Furthermore according to the invention the junctions can no longer be separated after the assembling procedure, whereby it is avoided that the parts of the lamp accidentally fall apart.

According to an advantageous embodiment of the invention the lamp is structured such that the conicity of the frustoconical members is in the range of 0° to 40° , preferably in the range of 10° to 30° , especially 20° .

Moreover according to the invention the joining means may include a wire, at least two wire locks, an upper locking device and a lower locking device with the result that a reliable and centrally arranged junction is obtained.

According to an advantageous embodiment of the invention both the upper and the lower locking device may comprise a circular disk member with three openings, and the openings of the locking devices may be arranged along a main axis of the disk member, and the opening adjacent the centre may be of a larger diameter than the openings adjacent the periphery of the disk member.

The invention is described in greater details below with reference to the accompanying drawing,

in which

Figure 1 illustrates an assembled base member,

Figure 2 illustrates a second embodiment of the lamp, where some of the parts have been separated,

Figure 3 is a cross-sectional view taken along the longitudinal axis of the lamp of the embodiment of Figure 2,

Figure 4 illustrates a detail of the arranging of the female and the male members on two of the conical members of the lamp,

Figure 5 illustrates a detail of the junction on the dome-shaped member,

Figure 6 is an inclined bottom view of the lowermost member,

Figure 7 illustrates an embodiment of the joining means,

Figure 8 illustrates a lamp packed for transport, and

Figure 9 illustrates the lamp of Figure 8, but where the dome-shaped member has been partially taken up.

Figure 1 illustrates the entire lamp designated the reference numeral 1. The lamp comprises a base member 3 and an electric wiring 9. The base member 3 comprises four members, viz. an uppermost frustoconical member 5, an intermediary frustoconical member 6, a lowermost frustoconical member 7 and a dome-shaped member 12. The electric wiring 9 includes inter alia a conduit 15 and a plug 16. The members 5, 6, 7 are releasably interconnected and matching in pairs. Means 20, 21, 22, 23, 24 are provided for the keeping together of the members 5, 6, 7, 12. The dome-shaped member 12 is situated atop the largest frustoccnical member 5, which in turn is situated atop the second largest frustoconical member 6 in turn situated atop the third lar gest frustoconical member 7. The two middle frustoconical members 5, 6 are substantially shell-shaped, i.e. they are structured like a thin shell. The base member 3 is substantially frustoconical, where the smallest cross section has been arranged farthest from the light source.

Figure 2 illustrates a second embodiment of the invention, where the frustoconical members 5, 6 and 7 and the dome-shaped member 12 are interconnected by means of a centrally arranged wire 20. The dome-shaped member 12 and the frustoconical members 5, 6, 7 may be interconnected by one or more of the following assembling ways: snap-action, bayonet locking and/or by means of threads so as to achieve a high reliability of the structure. The members 5, 6, 7, 12 can be mutually secured by way of gluing.

Figure 3 illustrates how the centrally arranged wire 20 extends from the dome-shaped member 12

and down through all the frustoconical members 5, 6, 7 and into the bottom where it continues through a lower locking device 22 and upwards to the uppermost portion of the dome-shaped member 12. The electric wiring 9 is mounted on the dome-shaped member 12 on an upper locking device 21, the conduit 15 and the two ends of the wire 20 also extending through said locking device. The upper locking device 21 is covered by a sleeve 25.

Figure 4 illustrates the assembling of two of the frustoconical members 5, 6, 7. The male member 43 on one frustoconical member 5 or 6 is situated on the uppermost member of the frustoconical members 5, 6, 7, and the female member 42 is situated on the lowermost member of the frustoconical members 6 or 7 or vice versa in principle. When viewing the entire structure, the female member 32 of the uppermost junction 31 is situated on the dome-shaped member 12, and the male member 33 of the uppermost junction 31 is situated on the uppermost frustoconical member 5. The female member 42 of the middle junction 41 is situated on the intermediary frustoconical member 6, and the male member 43 of said middle junction 41 is situated on the uppermost frustoconical member 5. The female member 52 of the lowermost junction 51 is situated on the lowermost frustoconical member 7, and the male member 53 of said lowermost junction 51 is situated on the intermediary frustoconical member 6, the latter being illustrated in the best possible manner in Figure 3. The junctions can be arranged such that they cannot be separated after the arrangement. The conicity of the frustoconical members 5, 6, 7 is usually in the range of 0° to 40° , preferably in the range of 10° to 30° , especially 20° .

Figure 5 illustrates details of the uppermost portion of the dome-shaped member 12, where two wire locks 24, 25 are arranged above the upper locking device 21. A traction relief 17 for the conduit 15 is situated below the upper locking device.

Figure 6 is an inclined bottom view of the lowermost frustoconical member 7, where the lower locking device 23 is situated on the side facing downwards of the bottom. The plug 16 is inserted through an opening 14 in the bottom, said opening 14 being of a size exactly so large that the plug 16 can be inserted. After the plug 16 has been inserted, the opening 14 may optionally be closed by means of a piece of plate or the like, whereby it is possible to fill weight-increasing material into the bottom of the lamp, such as glass globes or pebbles. The weight-increasing material has the effect that the lamp is difficult to overthrow.

Figure 7 illustrates the wire 20, the upper locking device 21, the lower locking device 22, and the two wire locks 23 and 24. The wire 20 may be a single wire or a multiwire. The material must be

such that it does not creep or give, such as for instance steel. The upper locking device 21 and the lower locking device 22 may be identical for productional reasons, but in principle the lower locking device need not the central opening 65. The two locking devices may comprise several parts. The two wire locks 23 and 24 may comprise a locking member, such as a screw being screwed into said locking member in such a manner that it is possible to clamp said member onto a wire extending through an opening transverse to the screw. Other types of wire locks can also be used.

Figure 8 illustrates how the members 5, 6, 7, 12 can be packed in a box indicated by a dotted line. The latter packing possibility is particularly advantageous because the lamp is almost cubic during the transport.

Figure 9 illustrates the lamp parts not yet assembled and where the dome-shaped member 12 with the electric wiring 9 can be used for the transport of the various individual parts of the lamp structure.

The invention may be varied in many ways without thereby deviating from the scope thereof.

Claims

1. A lamp, such as a table or floor lamp (1), comprising a base member (3) and an electric wiring (9) associated with an electric light source, characterised in that the base member (3) comprises at least one and preferably three conical, hollow, substantially frustoconical members (5, 6, 7) and a dome-shaped member (12), whereby the members (5, 6, 7) are releasably interconnected and matching in pairs, and that means (20, 21, 22, 23, 24) are provided for keeping together the members (5, 6, 7, 12).

2. A lamp as claimed in claim 1, characterised in that the dome-shaped member (12) is placed atop the largest frustoconical member (5), which in turn is placed atop the second largest frustoconical member (6) in turn placed atop the third largest frustoconical member (7), and that at least the two middle frustoconical members (5, 6) are substantially shell-shaped, and that the base member (3) is frustoconical such that the smallest cross section is situated farthest from the light source.

3. A lamp as claimed in claim 1 or 2, characterised in that the dome-shaped member (12) and the frustoconical members (5, 6, 7) are interconnected in one or more of the following assembling ways: snap-action, bayonet locking and/or by means of threads.

4. A lamp as claimed in one or more of the claims 1 to 3, characterised in that the lowermost member (7) is shaped as a pot (Figure 3) compris-

ing at least one opening (14) for a conduit (15), said opening (14) being of a size exactly allowing insertion of a plug (16).

5. A lamp as claimed in one or more of the claims 1 to 4, characterised in that the entire electric wiring (9) is mounted on the dome-shaped member (12).

6. A lamp as claimed in one or more of the claims 1 to 5, characterised in that the female member (32) of the uppermost junction (31) is situated on the dome-shaped member (12), and that the male member (33) of said uppermost junction (31) is situated on the uppermost frustoconical member (5), and that the female member (42) of the middle junction (41) is situated on the middle frustoconical member (6), and that the male member (43) of said middle junction (41) is situated on the uppermost frustoconical member (5), and that the female member (52) of the lowermost junction (51) is situated on the lowermost frustoconical member (7), and that the male member (53) of said lowermost junction (51) is situated on the middle frustoconical member (6).

7. A lamp as claimed in one or more of the claims 1 to 6, characterised in that after the assembling procedure the junctions (31, 41, 51) can no longer be separated.

8. A lamp as claimed in one or more of the claims 1 to 7, characterised in that the conicity of the frustoconical members (5, 6, 7) is in the range of 0° to 40° , preferably in the range of 10° to 30° , especially 20° .

9. A lamp as claimed in one or more of the claims 1 to 8, characterised in that the joining means (20, 21, 22, 23, 24) include a wire (20), at least two wire locks (23, 24), an upper locking device (21) and a lower locking device (22).

10. A lamp as claimed in one or more of the claims 1 to 9, characterised in that both the upper (21) and the lower (22) locking device comprises a circular disk member with three openings (64, 65, 66).

11. A lamp as claimed in one or more of the claims 1 to 10, characterised in that the openings (64, 65, 66) of the locking devices (21, 22) are arranged along a main axis of the disk member, and that the opening (65) adjacent the centre is of a larger diameter than the openings (64, 66) adjacent the periphery of the disk member.

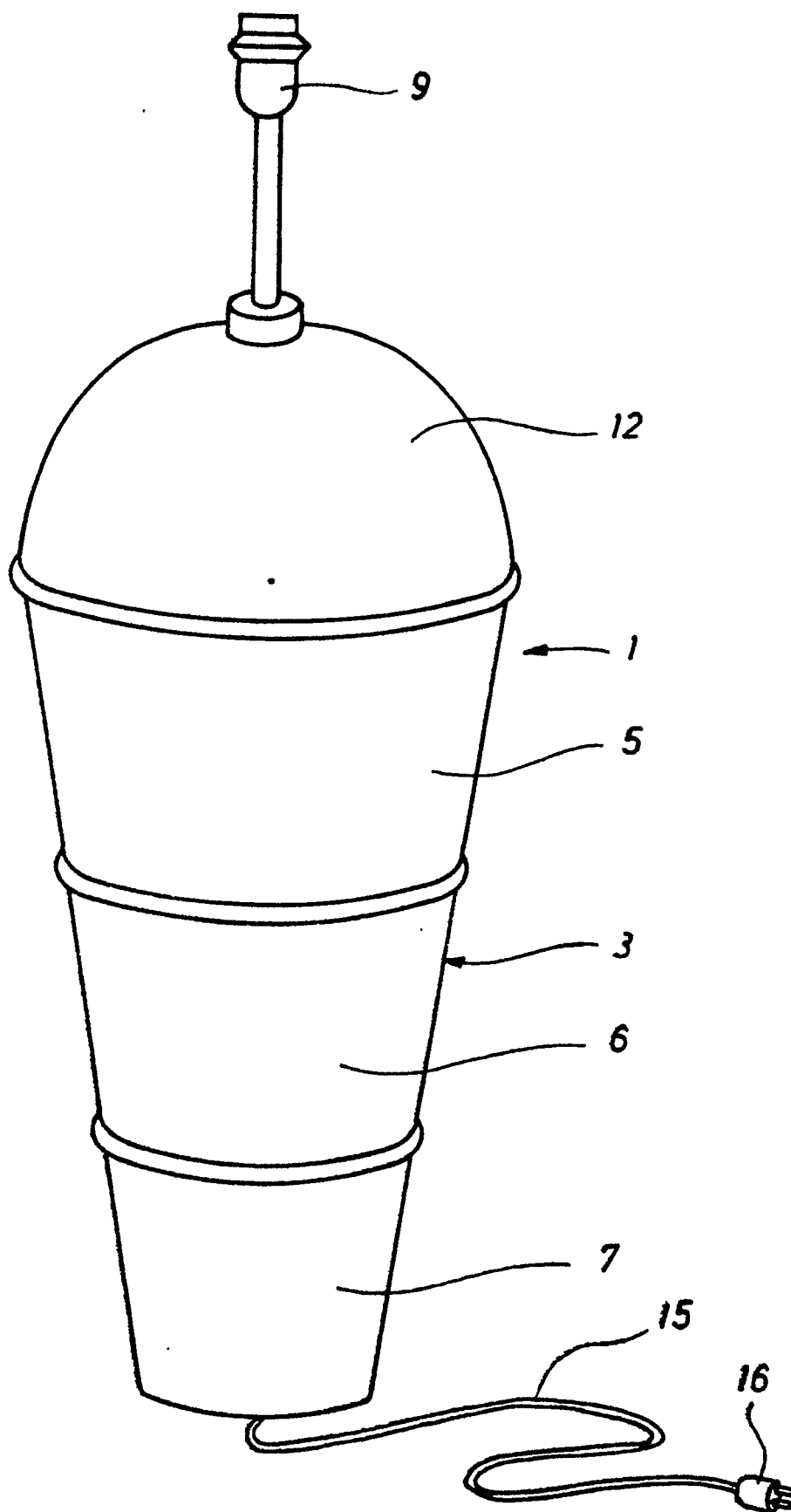


Fig.1

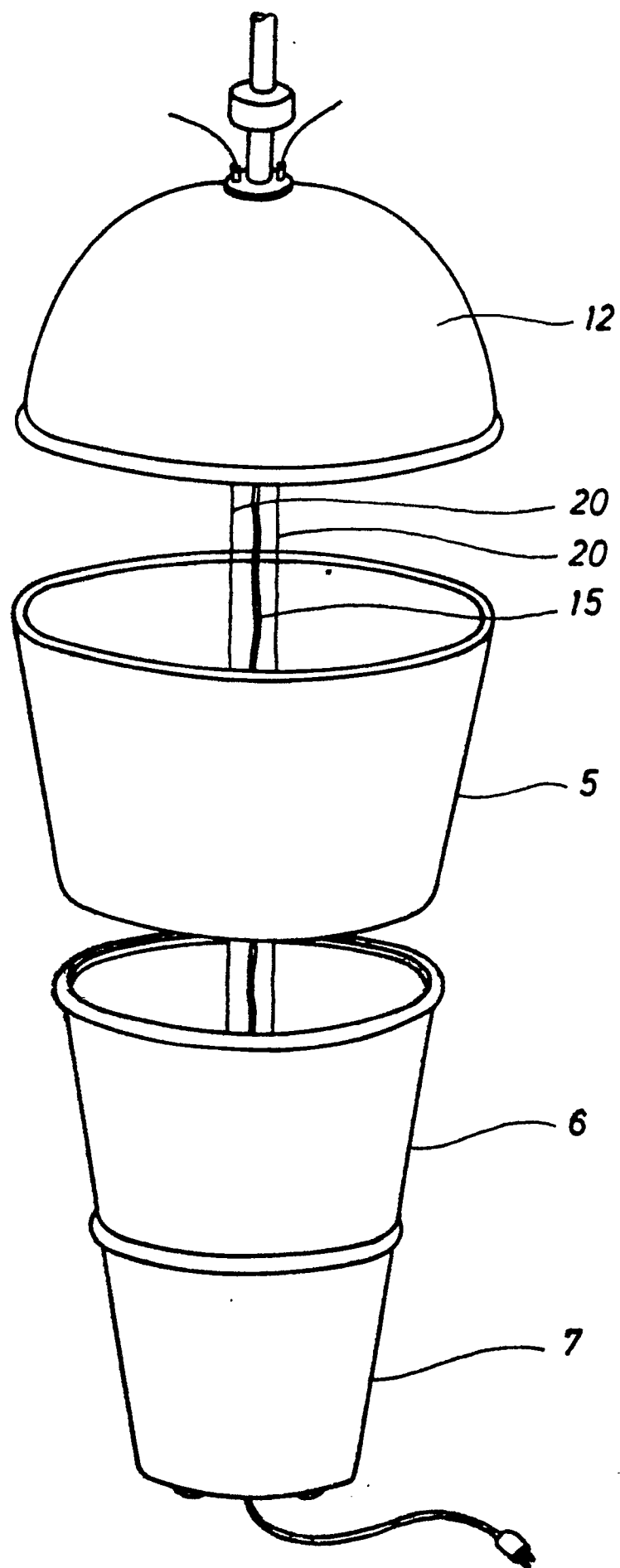


Fig.2

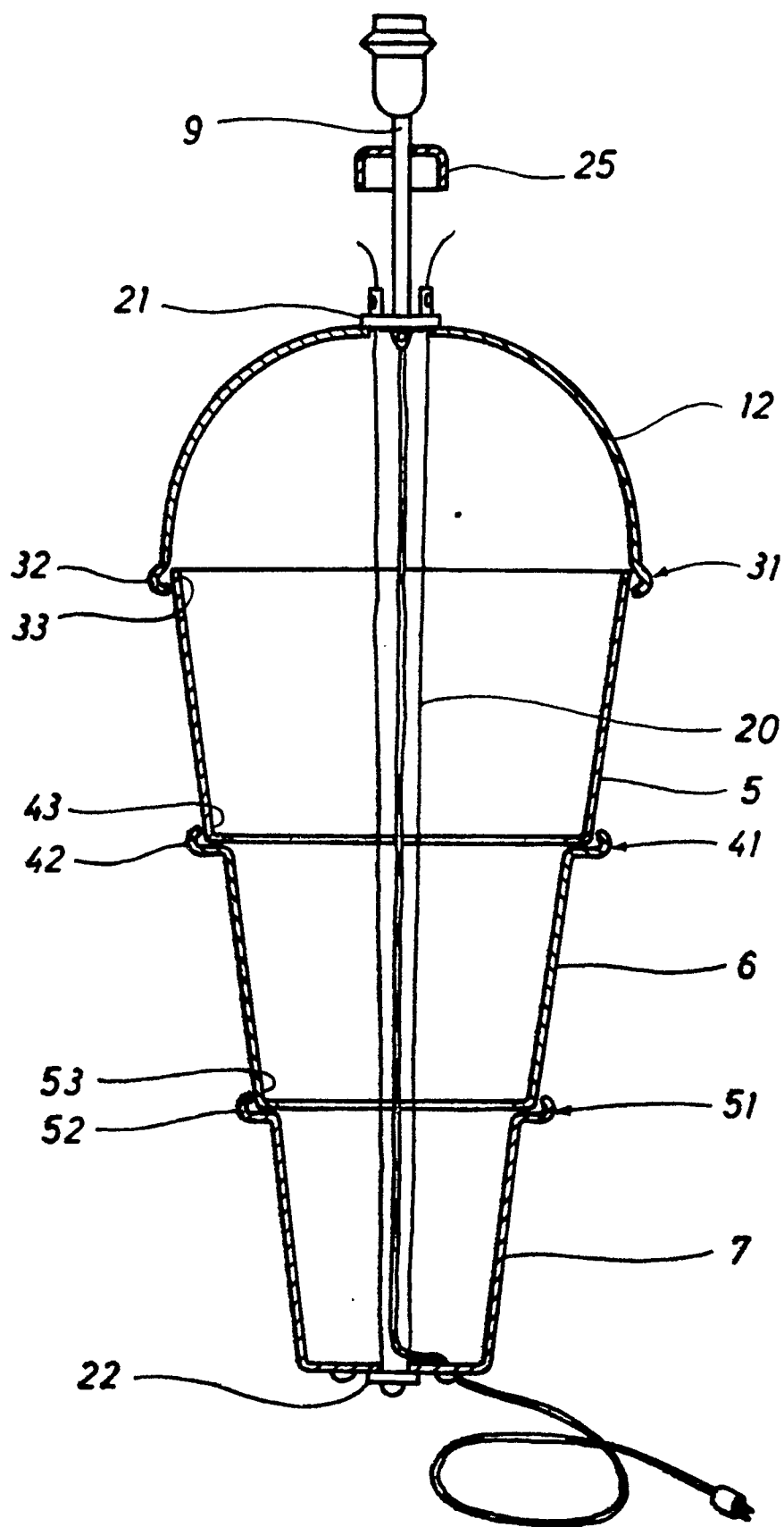
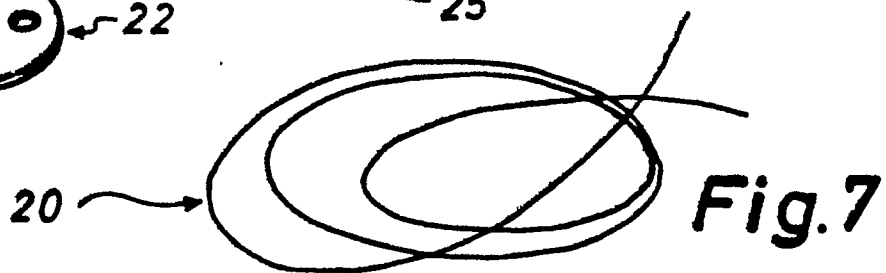
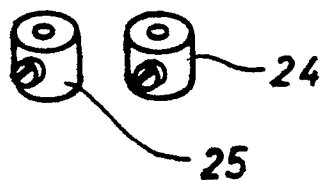
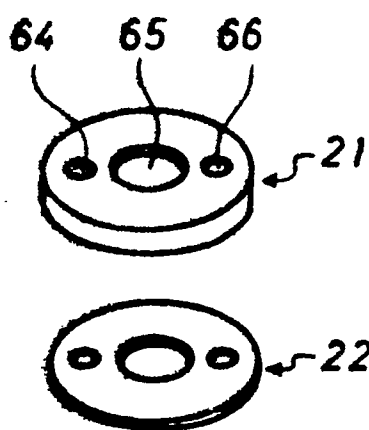
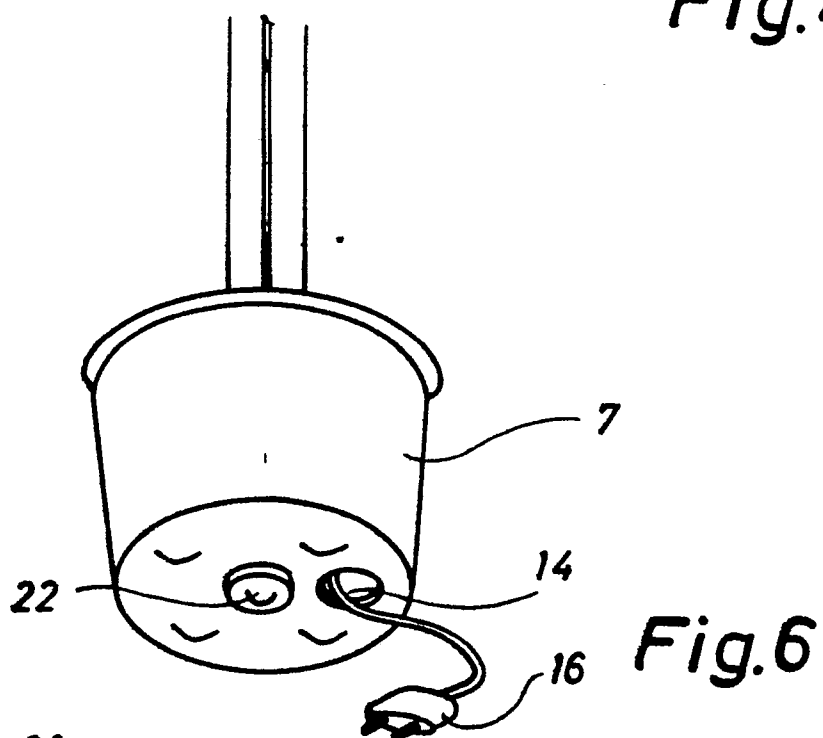
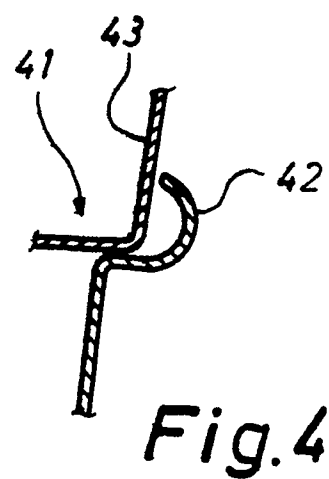
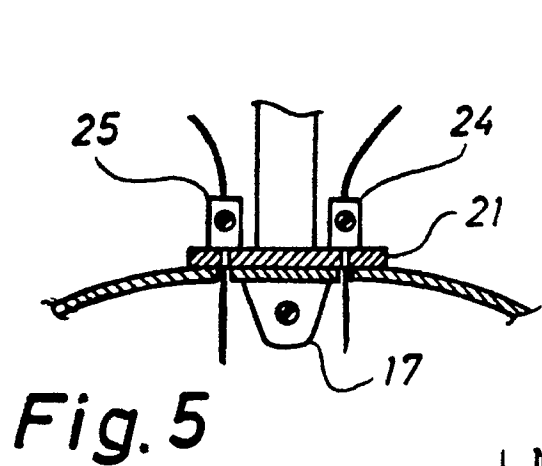


Fig.3



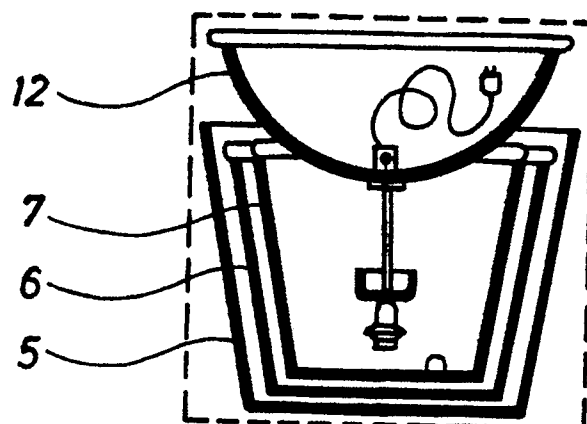


Fig. 8

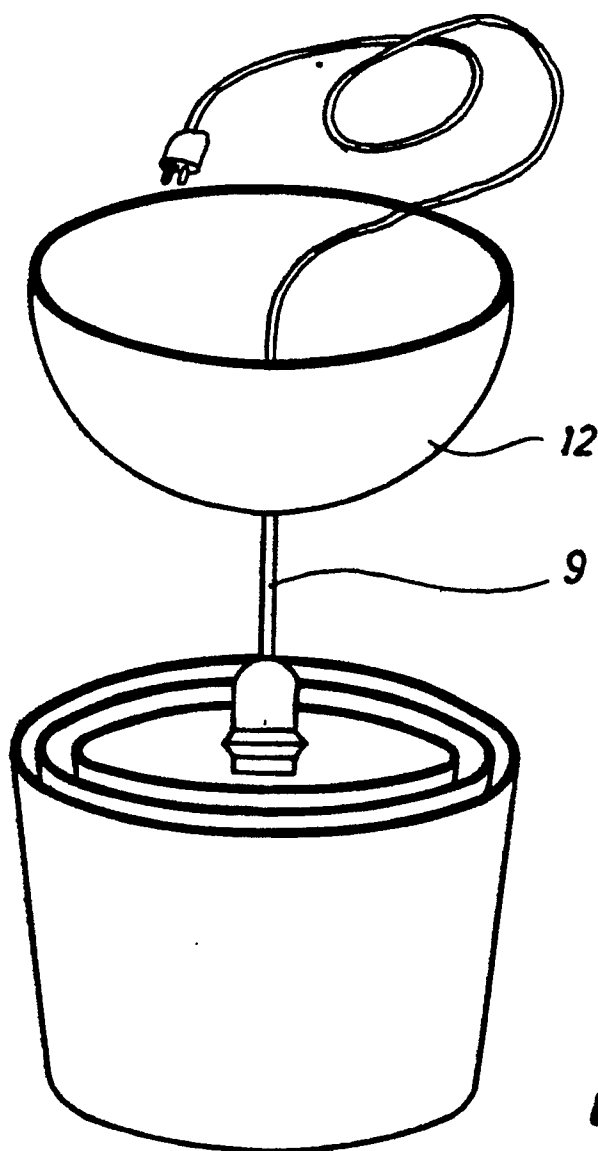


Fig. 9



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 90 61 0037

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	GB-A-1 469 568 (FASS) * Whole document *	1	F 21 V 21/06
A	---	2,4,8	
A	US-A-4 509 105 (SHORT) * Figure 3 *	1,4,5	
A	---		
A	US-A-4 224 017 (KAYNE) * Figures 2-5 *	3	

			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			F 21 V F 21 S
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 10-08-1990	Examiner FOUCRAY R.B.F.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document			