

Specification

Lamp

The invention relates to a lamp of the type cited in the generic part of Claim 1.

Such a lamp is known from US 7 484 858 B2.

This lamp consists substantially of a lamp head, a stand foot and an upright tube connecting the lamp head and the stand foot. These elements can be connected to each other in a releasable and latchable manner. The stand foot is designed here as a case and serves during transport and storage to receive the lamp head with the associated mains cable and the upright tube.

The present invention should improve the support of the lamp elements, in particular of the lamp head, inside the case in such a manner that on the one hand the lamp elements, in particular the lamp head, can be rapidly removed without problems and on the other hand the lamp elements are securely fixed inside the case even during transport, whereby the entire case should be constructed as compactly as possible.

This problem is solved in accordance with the suggestion according to Claim 1 in that compartments for receiving the disassembled stand foot and the mains cable are provided on both sides of the lamp head inserted into the stand foot, which compartments can be closed with cover flaps attached in an articulated manner to the stand foot.

In this arrangement the lamp head can be designed according to Claim 2 as a mobile hand lamp, whereby it comprises a handle on its top.

Constructive details that make possible a simple assembly or disassembly of this lamp and its reliable transport constitutes subject matter of the other subclaims 3 to 7.

Such a mobile workplace lamp can preferably be used for industrial and scientific purposes in the testing of materials, e.g., the surface testing of lacquered parts or in archaeology, whereby the lamp head can be provided, depending on the intended use, with special lamps, e.g., lamps for generating UV- or IR light.

The subject matter of the invention is explained in detail in the following using an exemplary embodiment shown in the drawings.

The drawings show an exemplary embodiment of the lamp in accordance with the invention in a perspective presentation as follows:

- Figure 1 shows a lamp in accordance with the invention in an exploded view,
- Figure 2 shows a stand foot constructed as a transport case viewed from the bottom,
- Figure 3 shows the stand foot according to figure 2 in the open state with the upright tube to be inserted,
- Figure 4 shows a stand foot according to figures 2 and 3 with the lamp head to be inserted,

Figure 5 shows the partially closed stand foot according to figures 2 to 4 with inserted lamp head and upright tube, and

Figure 6 shows the lamp according to figure 1 in the completely assembled state.

As figures 1 and 6 show, the mobile workplace lamp in accordance with the invention consists substantially of a lamp head 1 that forms the actual lamp head and is fastened by an upright tube 2 to stand foot 3 set on the base. Upright tube 2 can be set with a pin 2a into a sleeve 4 provided on stand foot 3 and locked in the manner of a bayonet catch in the correct position. In a similar manner lamp head 1 is provided on its side with a pin 5 that can be set into a pin receptacle located on the upper end of upright tube 2 and that can also be locked in it. The mains cable 6 shown in figure 1 adjacent to lamp head 1 can be fixed on stand 2 in the assembled state shown in figure 6 with the aid of cable holders 7 constructed as clips.

Figure 2 shows stand foot 3 serving as transport case and viewed from below in contrast to the view according to figure 1, into which lamp head 1 with its mains cable 6 and upright tube 2 are inserted, whereby cover flaps 9 attached in an articulated manner cover the inner space of stand foot 3, which now forms a transport case. Lamp head 1 is inserted here in such a manner into the inside of stand foot 3 that the handle 8 provided on the top of lamp head 1 projects upward and thus serves for a simple transport.

The means for fastening the disassembled individual parts of the lamp inside lamp foot 3 forming the transport case are explained using figures 3, 4 and 5.

In order to disassemble the lamp shown with figures 1 and 6, at first lamp head 1 fixed by pin 5 on upright tube 2 is to be withdrawn. Then, in order to disassemble upright tube 2 locked in a bayonet manner by pin 2a and sleeve 4 it is rotated counterclockwise and withdrawn from sleeve 4.

In order to stow lamp head 1 and upright tube 2 in stand foot 3 forming a transport case in accordance with figure 2, this stand foot is to be rotated into the position shown in figures 3 to 5. Figure 2 shows rotated stand foot 3 with open cover flaps 9a and b.

The compartment for receiving disassembled upright tube 2 is located below cover flap 9a. In order to fix this flap on the one hand a resilient clamp 10a into which upright tube 2 can be inserted with its lower pin 21 and on the side wall 3b a resilient tongue 10b which engages in the pin receptacle 2b are provided inside stand foot 3. This fixes upright tube 2 securely but in a simple and detachable manner in stand foot 3. Lamp head 1 is inserted, as figure 4 illustrates, in the area between the two flaps 9a and 9b in such a manner, as figure 2 shows, that handle 8 for purposes of transportation projects over the top of stand foot 3 serving as a transport case.

The fixing of lamp head 1 takes place on the one hand with the aid of pin 5, that that can be resiliently inserted into sleeve 4 associated with it. In order to secure the position a locking bolt 12 extending through side wall 3b is provided that secures pin 5 and therewith lamp head 1 in its position. On the opposite side lamp head 1 is fixed by a catch tongue 11 provided on side wall 3a, which tongue surrounds a catch nose located on lamp head 1 with its catch opening. The connection between the catch tongue and lamp head 1 can be loosened by deflecting catch tongue 11.

As figure 4 furthermore illustrates, wound-up mains cable 6 with its plug 6a finds room in the compartment under flap 3b adjacent to lamp head 1.

The inner space of stand foot 3 is closed by pivoting flaps 9a and 9b, so that stand foot 3 now forms a transport cage that is easy to manage and carry by handle 8.

Corks 13 and 14 preferably consisting of elastic material are provided on the top and the bottom of stand foot 3 that serve for the secure and protective support of stand foot 3 in the positions shown in figure 1 and figure 2.

The following work steps are to be performed for setting up the lamp in the inverse sequence:

- a) Open cover flaps 9a and 9b.
- b) Pivot catch tongue 11 away for loosening the catch on the one side of lamp head 1 and pressing in the locking bolt 12 for unlocking lamp head 1 on the other side.
- c) Remove upright tube 2 from resilient clamp 10a and from resilient tongue 10b.
- d) Close cover flaps 9a and 9b.
- e) Rotate stand foot 3 into the position shown in figure 1.
- f) Insert upright tube 2 into sleeve 4 and rotate it clockwise through 30°. Upright tube 2 is locked in the correct position in this position by the bayonet catch formed by pin 2a and sleeve 4.
- g) Insert lamp head 1 with its pin 5 into pin receptacle 2b of upright tube 2.
- h) Suspend mains cable 6 in cable holder 7. Then the lamp can be connected to plug 6a of the mains.

In as far as a stationary object is to be illuminated in mobile use only by lamp head 1, the latter can be simply pulled off from upright tube 2 and manually used.

List of reference numerals

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| 1 | lamp head |
| 1a | catch nose |
| 2 | upright tube |
| 2a | pin |
| 2b | pin receptacle |
| 3 | stand foot |
| 3a, b | side walls |
| 4 | sleeve |
| 5 | pin |
| 6 | mains cable |
| 6a | plug |
| 7 | cable holder |
| 8 | handle |
| 9a, b | cover flaps |
| 10a | resilient clamp |
| 10b | resilient tongue |
| 11 | catch tongue |
| 11a | catch opening |
| 12 | locking bolt |
| 13 | cork |
| 14 | cork |

Claims

1. A lamp, consisting of a lamp head, a stand foot and an upright tube connecting the lamp head and the stand foot, which latter are connected to one another in a releasable and latchable manner, whereby the stand foot (3) is designed as a case for receiving the lamp head (1) with the associated mains cable (6) and the upright tube (2), characterized in that compartments for receiving the disassembled stand foot (3) and the mains cable (6) are provided on both sides of the lamp head (1) inserted into the stand foot (3), which compartments can be closed with cover flaps (9a, 9b) attached in an articulated manner to the stand foot (3).
2. The lamp according to Claim 1, characterized in that the lamp head (1) is constructed as a mobile hand lamp and comprises a handle (8) on its top.
3. The lamp according to Claims 1 and 2, characterized in that the lamp head (1) and the upright tube (2) comprise pins (5, 2a) and that the upright tube (2) and the stand foot (3) comprise pin receptacles associated with the pins (5, 2a).
4. The lamp according to one of Claims 1, 2 or 3, characterized in that in order to fix the disassembled upright tube (2) inside the stand foot (3) a resilient clamp (10a) and a tongue (10b) are provided.
5. The lamp according to one of Claims 1 to 4, characterized in that in order to fix the disassembled lamp head (1) inside the stand foot (3) a resilient catch tongue (11) is arranged on a side wall (3a) of the stand foot (3) and that a sleeve (4) for receiving the pin (5) provided on the lamp head (1) is arranged opposite this catch tongue on the other side wall (3b) of the stand foot (3).

6. The lamp according to Claim 5, characterized in that a locking bolt (12) extending through the side wall (3b) of the stand foot (3) is provided on the sleeve (4).

7. The lamp according to one of Claims 1 to 6, characterized in that corks consisting of elastic material are arranged on the top and the bottom of the stand foot (3).