

Light fixture

The invention relates to a light fixture with a light chassis which supports the lamps, preferably fluorescent lamps, and on the light exit side of which a transparent shade is affixed by means of a shade frame.

A light head of such design can be part of a floor standard lamp, but also of a ceiling, wall, or table lamp.

The design of such light head is especially characterized by the design of the light fixture frame.

In order to cater for the various preferences of customers in terms of designs, manufactures are required to hold a large inventory of different design light fixtures. The objective of the present invention is therefore to simplify the manufacture of the different designs of light fixtures and thus make them less costly.

As proposed by Claim 1, this problem is solved in that the shade frame is attached to the light chassis so that it can be easily removed and replaced by means of a detent mechanism.

As proposed by Claim 2, this detent mechanism can have deflectable locking levers arranged on the light chassis that engage into the shade frame from below by means of latch lugs to fix it into its position of use.

Such locking levers can either be pivoted on the light chassis or can consist of an elastic ductile material themselves, as proposed by Claim 10, so that they can be firmly attached to the light chassis.

In addition to the latches that fix the shade frame into its position of use, Claim 3 proposes intermediate latches, which keep the shade frame in an intermediate position, so that it cannot be dropped accidentally and damaged as a result.

The intermediate latches can be provided in addition to the previously mentioned latch lugs on the locking lever. According to the proposal pursuant to Claim 4, however, additional locking levers are provided to which these intermediate latches are attached. These locking levers are also arranged on the light chassis so that they can be deflected, preferably by pivoting.

According to Claim 5, such locking levers can be provided at least on one side, or according to Claim 6 be provided on opposite sides of the light chassis.

As proposed by Claim 7, however, the shade frame is suspended on one side with locking levers and on the side of the light chassis that is opposite the locking levers is suspended so it can be pivoted and is also detachable.

According to Claim 8, the locking levers are provided with actuators that are accessible from the outside for easy operation.

According to Claim 9, in order to latch the shade frame, it is provided with latches on the side facing the locking levers that are assigned to the latch lugs of the locking levers. Such latches can preferably consist of a cross member that protrudes to the inside and has an edge lip.

The subject matter of the invention is explained by means of an embodiment illustrated in the drawings, as follows:

Figure 1: is a perspective illustration of a floor standard lamp designed as taught by the invention,

Figure 2: is a perspective illustration of the floor standard lamp according to Figure 1 with a hinged-out shade frame

Figure 3: is an enlarged sectional detail view of the light head with the shade frame in the engaged position in the vicinity of the locking lever 11,

Figure 4: is a sectional view according to Figure 3 in the vicinity of the locking lever 16 with the shade frame in the disengaged position,

Figure 5: is a sectional view according to Figure 4 with the hinged-out shade frame, and

Figure 6: is a sectional view according to Figure 3 with a varied shade frame.

The solution as taught by the invention is explained by means of the floor standard lamp that is completely illustrated in Figures 1 and 2, which, as is known, consists of a light head 1 that is supported by a pillar stand 30 which for its part rests with a base 32 on the floor.

The light head 1 consists essentially of a light chassis 10, on which fluorescent lamps 33 are attached by means of lamp sockets 34. The fluorescent lamps 33 can be switched on and off with a switch 31 that is fitted at half of the height of the pillar stand 30.

The light chassis 10 is surrounded by a shade frame 20, which, as is shown in the subsequent Figures, has a transparent shade 21 that covers the lower side of the light head 1.

The shade frame 20 can be hinged out into the position illustrated in Figure 2 after loosening the locking levers 11 that are holding the frame and can after shifting it a little in the direction of the arrow C, be removed completely. As a result, the owner can then replace this shade frame 20 with differently shaped frames if so desired, for instance with a frame that has rounded edges such as illustrated in Figure 6.

The detent mechanism for fixing the shade frame 20 is illustrated and explained in detail in the enlarged sectional views pursuant to Figure 4 to 6.

This detent mechanism consists of locking levers 11 that are attached on one front face of the light chassis 10, on the latch lugs 12 of which the shade frame 20 rests with an edge lip 24 that is facing down and is arranged on the upper cross member 23. In the embodiment that is illustrated here, the locking lever 11 that is made of an elastic plastic is attached on the chassis 10 with a support arm 14. Its upper free end projects with an actuator 13 slightly from the upper side of the light chassis 10. The locking lever can be deflected in the direction of the arrow A by means of this actuator 13 against the chassis 10, so that its latch lug 12 is disengaged with the edge lip 24 of the shade frame 20. In this manner, the shade frame 20, on the lower cross members of which the transparent shade 21 is attached with a seal 22 inserted between, can be swung out towards the bottom.

In order to make it easier to replace the shade frame 20 with the shade 21 and keep it in an intermediate position, further locking levers 16 are provided laterally offset to the locking levers 11 on the light chassis, on which the shade frame 20 rests with its edge lip 24 in the direction of the protruding latch lugs 17 of the shade frame 20. These locking ribs 16 also consist of elastically flexible plastic and on their upper ends are fixed with support arms 18 on the light chassis 10, while their lower ends can be pivoted in the direction of the arrow B when the locking lever 16 is pressed, so that their latch lugs 17 are disengaged with the edge lip 24 of the shade frame 20.

In order to secure the position of the locking lever 16, it is fitted with a guide arm 19 that is guided in a guide slot 19a of the light chassis 10.

The locking levers 11 are also fitted in a corresponding manner with guide arms 15. Above the latch lug 17, the locking lever 16 is provided with a recess 16a which serves as a finger seat.

After pushing the locking lever 16 in the direction of the arrow B, the shade frame 20 can be completely swung out towards the bottom, and as already mentioned in context with Figure 2, be replaced with a differently shaped shade frame 20' that is illustrated in Figure 6.

List of reference symbols

- 1 Light head
- 10 Light chassis
- 11 Locking lever
- 12 Latch lug
- 13 Actuator
- 14 Support arm
- 15 Guide arm
- 16 Locking lever
- 16a Recess
- 17 Latch lug, intermediate latch

- 18 Support arm
- 19 Guide arm
- 19a Guide slot
- 20 Shade frame
- 20' Shade frame
- 21 Shade
- 22 Seal
- 23 Upper cross member
- 24 Edge lip
- 25 Lower cross member
- 26 Housing groove
- 30 Pillar stand
- 31 Switch
- 32 Base
- 33 Fluorescent lamps
- 34 Lamp socket

CLAIMS

1. Light fixture with a light chassis which supports the lamps, preferably fluorescent lamps, and on the light exit side of which a transparent shade is affixed by means of a shade frame, characterized in that the shade frame (20, 20') is attached on the light chassis (10) so that it can be removed and replaced.
2. Light fixture according to Claim 1, characterized in that the detent mechanism has deflectable locking levers (11) arranged on the light chassis (10) that engage into the shade frame (20, 20') from below by means of latch lugs (12) to fix it into its position of use.
3. Light fixture according to Claim 2, characterized in that in addition to the latches (12) holding the shade frame (20, 20') in its position of use intermediate latches (17) are provided, which keep the shade frame (20, 20') in an intermediate position.
4. Light fixture according to Claim 3, characterized in that the intermediate latches are provided in the form of latch lugs (17) on additional locking levers (16), which are arranged on the light chassis (10) so that they can be deflected, preferably by pivoting
5. Light fixture according to Claim 2, 3, or 4, characterized in that the locking levers (11, 16) are arranged on at least one side of the light chassis (10).
6. Light fixture according to Claim 2, 3, or 4, characterized in that the locking levers (11, 16) are arranged on opposite sides of the light chassis (10)
7. Light fixture according to Claim 5, characterized in that the shade frame (20, 20') on the side of the light chassis (10) that is opposite the locking levers (11, 16) is suspended so it can be pivoted and is also detachable
8. Light fixture according to one of Claims 2 to 7, characterized in that the locking levers (11) have actuators (13) that are accessible from outside.
9. Light fixture according to one of Claims 2 to 8, characterized in that the shade frame (20, 20') has assigned latches at least on the side facing the latch lugs (12, 17) of the locking levers (11, 16), which latches preferably have a cross member (23) that protrudes towards the inside and have an edge lip (24).
10. Light fixture according to one of the preceding Claims, characterized in that the locking levers (11, 16) consist of an elastic ductile material, preferably flexible plastic, and are firmly connected with one of their ends (14, 18) to the light chassis (10), while the latch lugs (12, 17) are provided on the free ends.