

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets

(11)

Publication number:

0 391 482
A2

(12)

EUROPEAN PATENT APPLICATION

(21)

Application number: **90200782.2**

(51)

Int. Cl.⁵: **H01K 1/16**

(22)

Date of filing: **02.04.90**

(30)

Priority: **06.04.89 DE 3911148**

(43)

Date of publication of application:
10.10.90 Bulletin 90/41

(84)

Designated Contracting States:
BE DE FR GB

(71)

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Electric incandescent lamp.

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The electric incandescent lamp has incandescent bodies (3, 4), each comprising an axial leg (7, 9) and a transversal leg (8, 10). The legs (7, 9; 8, 10) are connected to end portions (15, 17; 16, 18) of current supply conductors (11, 13; 12, 14) which extend at right angles to them, so that deformation of the incandescent bodies during or after mounting is counteracted.

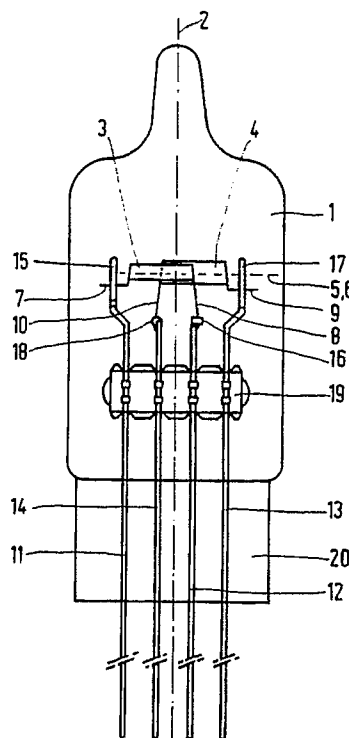


FIG.1

EP 0 391 482 A2

Electric incandescent lamp.

The invention relates to an electric incandescent lamp comprising
a lamp vessel having an axis,
incandescent bodies arranged cross to that axis,
each such body having an axis and comprising a
first leg, which extends substantially in the direction
of the axis of the incandescent body, and a second
leg, first and second current supply conductors
entering the lamp vessel next to one another, hav-
ing a respective end portion, each of these conduc-
tors being connected with its end portion to a first
or second leg, respectively, of an incandescent
body, which leg is cross to the said end portion.

A lamp of the above kind is known from GB 2060248 and is used inter alia in the USA as a motorcar headlamp. In conjunction with a reflector and a lens, one incandescent body generates a passing beam and another incandescent body generates a main beam. An accurate positioning of those incandescent bodies in the lamp vessel, therefore, is important.

In the known lamp the legs of the incandescent bodies extend in a substantially axial direction relative to the incandescent body in question. Deformation of these incandescent bodies, e.g. curvature, frequently occurs when these incandescent bodies are assembled with the current supply conductors. As a result, they are not given their predetermined position in the lamp vessel.

The same effect is found to occur when the legs of the incandescent bodies all extend cross to the axis of the incandescent bodies in question.

The invention has for its object to provide an electric incandescent lamp of the kind described in the opening paragraph, which, among other characteristics, is of simple construction and in which the deformation of the incandescent bodies is counteracted.

This object, according to the invention, is achieved in that the second legs of the incandescent bodies and the end portions of the second current supply conductors connected to them extend mainly cross to the axis of the relevant incandescent body.

Owing to the geometry of the incandescent bodies in combination with their legs and the current supply conductors, the incandescent bodies can be mounted without mechanical stresses in spite of minor differences in shape between the incandescent bodies of one batch.

Mechanical stresses which would occur during operation of the lamp, both in the axial direction along an incandescent body and perpendicularly to it, can be relieved without substantial deformation of the incandescent body.

The legs of the incandescent bodies may be welded to the relevant end portion of a current supply conductor, or they may be clamped by the end portion of such a conductor which has been bent back upon itself. In the latter case additional welding may take place as well.

It is advantageous for achieving the lowest possible thermal load on the current supply conductors if the second current supply conductors extend less far in the direction of the axis into the lamp vessel than do the first current supply conductors.

To achieve a wide tolerance as to the geometry of the incandescent bodies with their legs, furthermore, it is advantageous if the end portions of the second current supply conductors extend in mutually opposing directions.

An embodiment of the lamp according to the invention is shown in the drawings, in which:

Fig. 1 shows a lamp in side elevation,

Fig. 2 shows the mount of the lamp of Fig. 1 in the same position,

Fig. 3 shows the mount of Fig. 2 rotated through 90° around the lamp axis,

Fig. 4 shows the incandescent bodies and current supply conductors of Fig. 2 viewed in axial direction.

In Fig. 1, the lamp has a lamp vessel 1, e.g. made of hard glass, with an axis 2, in which incandescent bodies 3, 4, having axes 5, 6, respectively, are arranged at right angles to the axis 2. The incandescent bodies 3, 4 have a respective first leg 7, 9 which extends substantially in the direction of the axis of the incandescent body, and a respective second leg 8, 10.

First and second current supply conductors 11, 13 and 12, 14, respectively, enter the lamp vessel 2 next to one another, in the Fig. through a pinched seal 20. Inside the lamp vessel 2 they are interconnected by a glass bridge 19.

In the Figs. 1-4, the current supply conductors 11, 13; 12, 14 have end portions 15, 17; 16, 18, respectively, with which they are connected to a first leg 7, 9, which extends cross to them, and a second leg 8, 10, respectively, of an incandescent body 3, 4.

The second legs 8, 10 of the incandescent bodies 3, 4 and the end portions 16, 18 of the current supply conductors 12, 14 connected to them extend mainly cross to the axis 5, 6 of the relevant incandescent body 3, 4.

The second current supply conductors 12, 14 extend less far in the direction of the axis 2 of the lamp vessel 1 than do the first current supply conductors 11, 13. As a result, they are thermally

loaded only to a small extent. The first current supply conductors 11, 13 are not strongly thermally loaded owing to the fact that they face the weakly radiating end faces of the incandescent bodies 3, 4. The end portions 16, 18 of the second current supply conductors 12, 14 extend in mutually opposing directions.

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Claims

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1. An electric incandescent lamp comprising a lamp vessel (1) having an axis (2), incandescent bodies (3, 4) arranged cross to that axis, each such body having axis (5, 6) and comprising a first leg (3, 4), which extends substantially in the direction of the axis of the incandescent body (3, 4), and a second leg (8, 10), first (11, 13) and second (12, 14) current supply conductors entering the lamp vessel next to one another, having a respective end portion (15, 17; 16, 18) each of these conductors being connected with its end portion to a first (7, 9) or second (8, 10) leg, respectively, of an incandescent body (3, 4), which leg is cross to the said end portion, characterized in that the second legs (8, 10) of the incandescent bodies (3, 4) and the end portions (16, 18) of the second current supply conductors (12, 14) connected to them extend mainly cross to the axis (5, 6) of the relevant incandescent body (3, 4).

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2. An electric incandescent lamp as claimed in Claim 1, characterized in that the second current supply conductors (12, 14) extend less far in the direction of the axis (2) into the lamp vessel (1) than do the first current supply conductors (11, 13).

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3. An electric incandescent lamp as claimed in Claim 1 or 2, characterized in that the end portions (16, 18) of the second current supply conductors (12, 14) extend in mutually opposing directions.

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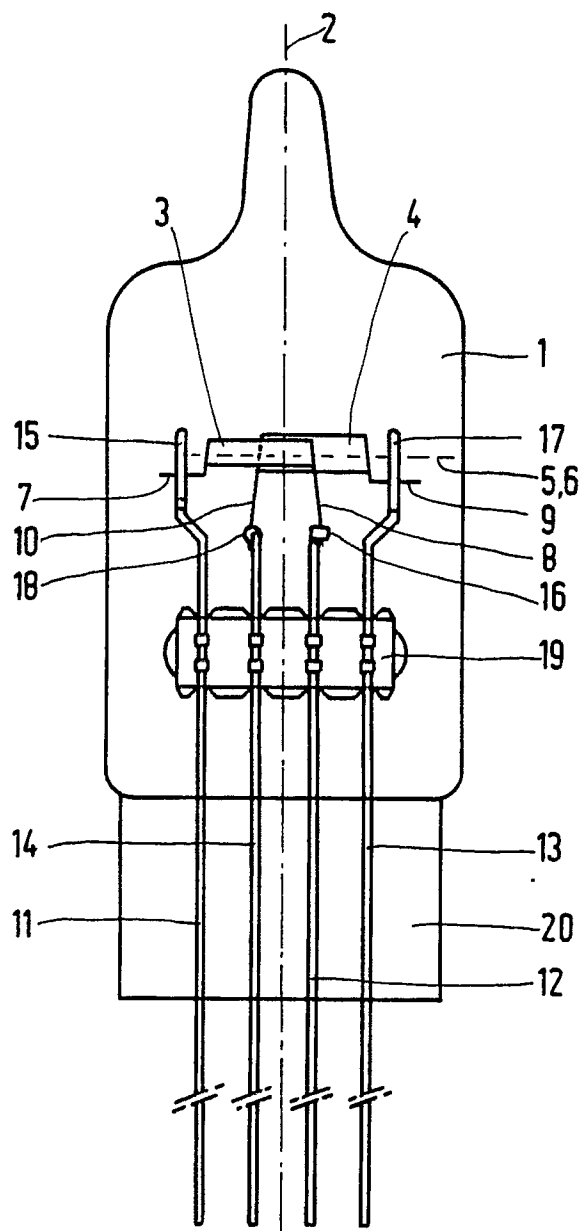


FIG. 1

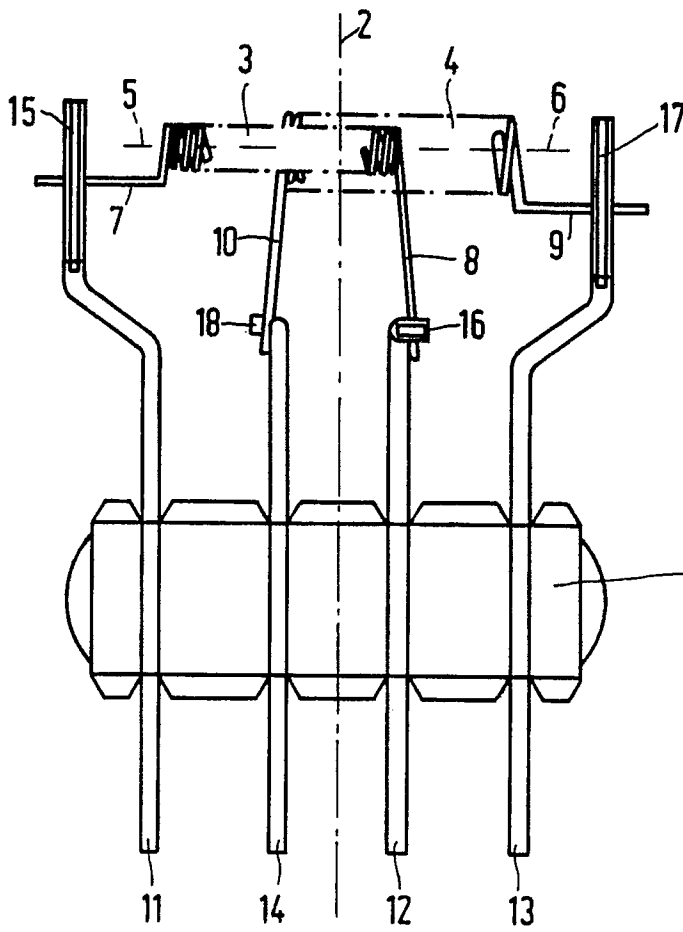


FIG. 2

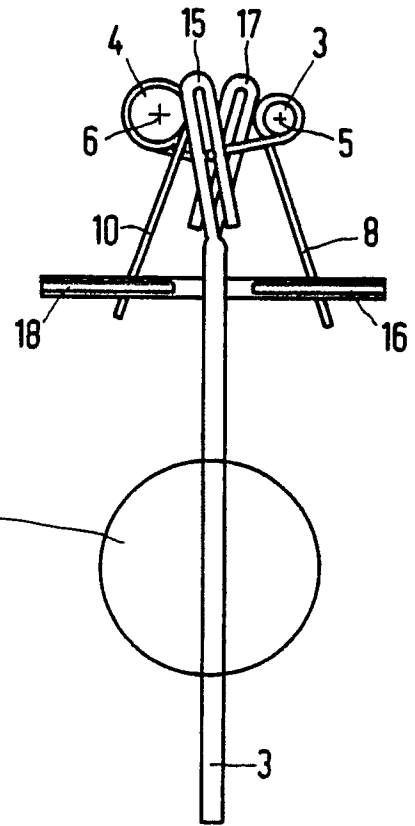


FIG. 3

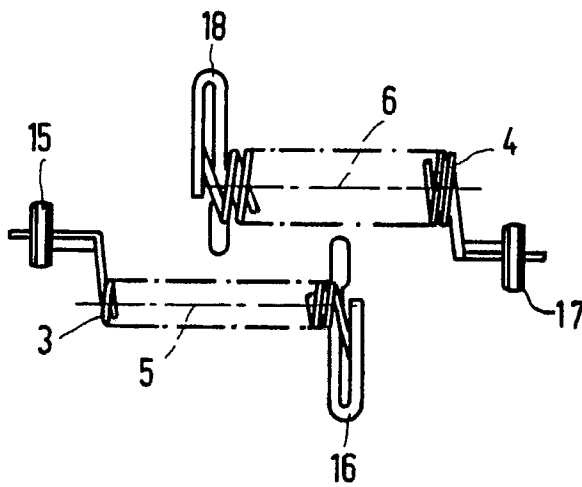


FIG. 4