Description

The invention relates to a capped high-pressure discharge lamp comprising

a discharge vessel having a first and a second neck-shaped portion facing one another and having seals through which respective first and second current supply conductors are passed to a pair of electrodes positioned in the discharge vessel,

a metal clamping member which clamps around the first neck-shaped portion of the discharge vessel,

a metal fixation member provided with first tongues which are connected to the clamping member and with second tongues having free ends,

a lamp cap of insulating material connected to the discharge vessel, which lamp cap at a side facing the discharge vessel has a first, circumferential cavity in which the fixation member is secured and a second, central cavity in which the first neck-shaped portion is accommodated, which central cavity affords access to a side of the lamp cap facing away from the discharge vessel, where the lamp cap carries a first and a second contact member to which the first and second current supply conductors, respectively, are connected.

Such a lamp is known from EP-0 309 041 A (PHN 12.568) and designed for use as a vehicle headlamp.

In order to be able to ignite such a lamp while it is still hot, use is made not only of a high voltage of several kV, but also of a high frequency of several kHz.

The lamp renders it possible to use a lantern of very small height, for example 5 cm, owing to its high brightness. In order to be accommodated therein, however, the lamp must be of compact construction.

In the known lamp, the clamping member is connected to the fixation member by means of a bush. The clamping member, the bush and the fixation member are necessary in that case for fixing the discharge vessel in the lamp cap in a position in which the pair of electrodes is aligned relative to reference locations at the lamp cap. During alignment the discharge vessel can be shifted, tilted, and rotated, as required.

Constructional parts of the lamp are under electrical tension and even pass current. The fixation member is included in the current circuit through the lamp, and the bush and the clamping member are connected to it.

It has been found that the compact construction of the lamp and the high applied voltages with their high frequencies can cause harmful and disadvantageous electrical effects, such as corona discharges, owing to which the voltage across the lamp can drop and lamp materials can be attacked. Breakdown may take place in the course of time as a result. These effects do not occur at low frequencies, for example below 100 Hz, under otherwise equal circumstances as regards voltage and geometry.

The invention has for its object to provide a capped high-pressure discharge lamp of the kind described in the opening paragraph which is of a simple and reliable construction.

According to the invention, this object is achieved in that the lamp cap at its side facing the discharge vessel has a third cavity with access to the side facing away from the discharge vessel, which cavity is separated from the first and the second cavity and through which a connection conductor is passed which runs from the second contact member along the discharge vessel to the second current supply conductor, which connection conductor is surrounded alongside the discharge vessel by an insulator extending into the third cavity;

the second tongues of the fixation member face the discharge vessel and lie with their free ends in the first cavity with clamping fit, the first tongues being welded to the clamping member.

In the lamp according to the invention, the clamping member and the fixation member are not live during lamp operation. The first current supply conductor on the one hand and the second current supply conductor and the associated connection conductor on the other hand are spatially separated and screened from one another. The lamp is of simple construction. Fewer metal parts are necessary for its assembly, while nevertheless a good alignment of the pair of electrodes is possible. The lamp is reliable and is capable of forming a passing beam or driving beam, depending on the nature of the lantern in which it is used.

A very attractive characteristic of the lamp according to the invention is the simplicity of its construction and the ease with which it can be assembled, especially with regard to the fixation member. This member may be manufactured from resilient metal tape, for example spring steel. The fixation member may simply be pressed into the first cavity of the lamp cap, where it fixes itself by means of its second tongues. These tongues lie against the boundary of the cavity with their free ends and anchor themselves therein in the manner of barbed hooks.

A fixation member can be very compact if the second tongues are bent back alongside the fixation member.

In a favourable embodiment, the cavity is formed so as to restrict rotation of the fixation member in the cavity. This may be realised, for example, in that the cavity has projections which point inwards and between which a second tongue is enclosed. Alternatively, the fixation member may have a third tongue which is enclosed in a recess in the cavity.

This embodiment is of particular importance since the position of the first tongues during assembly

of the lamp is thereby determined, which renders it easier to provide the clamping member with attachments.

In a favourable modification of the embodiment described, a depth stop for the fixation member is present between second tongues. This stop also contributes to an accurate position of the first tongues. The depth stop may comprise one or several elevations in the first cavity. It is favourable, however, for the fixation member itself to have one or several tags which abut in the cavity.

The clamping member may be a split sleeve which is provided around the first neck-shaped portion of the lamp in stretched-out condition. Alternatively, a sleeve consisting of two parts may be joined into a whole while keeping the neck-shaped portion clamped-in.

In view of the comparatively high operating temperature of the clamping member and the comparatively great differences in coefficient of expansion between a metal and glass having a high SiO_2 content of, for example, 95 % by weight or more, such as, for example, quartz glass, it is useful to use a clamping member having a resilient portion. The result of this is that a clamping force is exerted on the discharge vessel also under operating conditions.

Very favourable for that purpose is a clamping member which is tubular and which has sideways extending tags forming part of a first and a second circumference portion and welded together, and opposite these a hairpin-shaped, laterally projecting connection portion. Before being welded together, the tags facilitate the application of the clamping member; the hairpin-shaped connection portion also provides clamping force at elevated temperature. The clamping member may easily be manufactured from sheet material, for example, spring steel.

A modification of this embodiment of the clamping member is particularly favourable. In this case each of the two ends of the tubular member carries a pair of tags and a hairpin-shaped connection portion is present at each of the two ends. This modification provides the clamping member with a very stable position and also affords the possibility of making connections with the fixation member around substantially the entire circumference in the zone between the ends of the tube.

In another embodiment, the clamping member is tubular and has a set of tongues at a first and a second end portion, which tongues are bent inwards so as to face away from the discharge vessel.
This clamping member keeps the first neck-shaped portion securely fixed at two locations which are remote from one another in longitudinal direction of said portion.

The contact members at the lamp cap may be formed as, for example, pins, strips, bushes, etc. in order to cooperate with a connector which is connected to a supply source. It is favourable, however, if an insulated cable is fastened with electrical conduction to each of the contact members, which cables issue from a cover fastened to the lamp cap to the exterior. Detachable electrical connections can thus be moved to the supply source. This renders it possible to position them farther apart than is possible at the lamp cap.

The space inside the cap may be filled with a synthetic material, for example, with silicone resin.

In a favourable embodiment, the lamp cap carries a screen cap at the side facing the discharge vessel. The screen cap may become narrower towards the discharge vessel, for example stepwise or tapering, if this should be necessary to remain outside the beam of light rays generated by the lamp and travelling to a headlight reflector. The screen cap, for example made of ceramic material such as steatite, screens the lamp cap at least substantially from the radiation generated by the lamp, such as UV, IR and visible radiation.

The lamp cap may consist, for example, of a synthetic resin, for example a thermoplastic synthetic resin, such as polyether imide, polyether sulphon, polyphenylene sulphide, polyether etherketone, polypropylene oxide, polyamide imide, polyimide, polybutylene terephthalate, which may be filled with powdery or fibrous substances such as, for example, glass or chalk.

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

Fig. 1 is a lateral elevation;

Fig. 2 is a cross-section taken on the line II-II in Fig. 1 with screen cap 41 removed;

Fig. 3 is an elevation along III in Fig. 1 with cover 40 removed;

Fig. 4 is the fixation member of the lamp of Fig. 1 in lateral elevation;

Fig. 5 is the clamping member of the lamp of Fig. 1 in lateral elevation;

Fig. 6 is the clamping member of Fig. 5 viewed along VI.

Fig. 7 is a second embodiment of the clamping member.

In Fig. 1, the capped high-pressure discharge lamp comprises a discharge vessel 1 with opposing first and second neck-shaped portions 2 and 3, respectively, with seals. A first 4 and a second 5 current supply conductor, respectively, are passed through the latter to a pair of electrodes 6 arranged in the discharge vessel.

A metal clamping member 10 (see Fig. 4) is arranged with clamping fit around the first neck-shaped portion 2 of the discharge vessel 1.

A metal fixation member 20 (see Fig. 4) provided with first tongues 21 and second tongues 22 having free ends 23 is connected to the clamping member 10.

The lamp has a lamp cap 30 of insulating material which is connected to the discharge vessel 1.

At its side 31 (see Fig. 2) facing the discharge vessel, the lamp cap has a first, circumferential cavity 32 in which the fixation member 20 is fixed, and a second, central cavity 33 in which the first neck-shaped portion 2 is accommodated, which central cavity affords access to a side 34 of the lamp cap 30 facing away from the discharge vessel 1, where the lamp cap carries a first 35 and a second 36 contact member to which the first 4 and second 5 current supply conductors, respectively, are connected.

At its side 31 facing the discharge vessel, the lamp cap 30 has third cavity 37 with access to the side 34 facing away from the discharge vessel, separated from the first 32 and the second 33 cavity.

A connection conductor 7, which runs from the second contact member 36 to the second current supply conductor 5, is passed through said third cavity 37. Alongside the discharge vessel 1, this conductor 7 is surrounded by an insulator body 8, for example of Al_2O_3 or steatite, which enters the third cavity 37. Alternatively, the conductor 7 may be coated with an insulator, for example with a layer of ZrO_2 or Al_2O_3.

The fixation member 20 has second tongues 22 with free ends 23 which face the discharge vessel 1 and which rest with clamping fit in the first cavity 32 with their free ends 23. The first tongues 21 are welded to the clamping member 10. In the embodiment shown, the tongues 22 are bent back alongside the fixation member 20.

Insulated cables 38, 39 are connected to the contact members 35, 36 (Fig. 3), respectively, of the lamp cap 30 in an electrically conducting manner.

The cables 38, 39 issue to the exterior from a cover 40 fastened to the lamp cap 30 and made of, for example, polyether imide, which cover is filled with a synthetic resin, for example silicone resin. A screening cap 41, made of, for example, glass filled with mica, is present at the side 31 of the lamp cap 30 facing the discharge vessel 1. As is shown with a broken line starting from the pair of electrodes 6, this stepped cap is substantially outside the path of the beams to the reflector, i.e. to outside the lamp cap 31 in which the lamp can be placed.

In Fig. 2, the fixation member 20 is visible in the first, circumferential cavity 32 of the lamp cap 30, with the free ends 23 of its second tongues 22 in the first, circumferential cavity 32. The cavity is formed so as to restrict rotation of the fixation member 30. In the Figure, the tongue 22a has little space for rotation of the fixation member. The first cavity 32 has a recess 42 in which a third tongue 24 (see Fig. 4) present at the fixation member is enclosed. The recess 42 has radial boundaries. During mounting of the fixation member in the lamp cap, this member has a comparatively great diameter. As a result, the third tongue is comparatively far from the centre of the lamp cap, at an area where the recess is comparatively wide and where it can easily accommodate the third tongue. As the fixation member is pressed further into the cavity, the clamping force of the second tongues increases, the fixation member is reduced in diameter, the third tongue moves into a narrower portion of the recess, and the rotational position of the fixation member is determined with growing accuracy.

Reference locations 43 and a recess 44 serving as a rotation lock determine the position of the lamp in a reflector of a vehicle headlight. The pair of electrodes 6 (Fig. 1) is aligned relative thereto.

The separate third cavity 37 extends to several mm above the recess 44. The connection conductor 7 is included therein with its insulation 8.

The central cavity 33 in Fig. 3 issues high above the recess 44 at the side 34 of the lamp cap 30 facing away from the discharge vessel 1. The first current supply conductor 4 is passed through a slot 45 sideways towards the first contact member 35. A partition wall 46 spatially increases the distance between the contact members 35, 36.

It is evident from Fig. 4 that a depth stop for the fixation member 20 is present in the first cavity 32 of the lamp cap 30 of Fig. 1. The fixation member 20 has at least one tag 25 situated between two second tongues 22 and abutting in the cavity 32. In the Figure, such a tag 25 is present between every two second tongues 22. The third tongue 24 restricts the rotation possibility of the member. The clamping member 10 and the first neck-shaped portion 2 with seal 2' of the discharge vessel 1 are indicated diagrammatically.

The first tongues 21 lie substantially completely outside the first cavity 32 so as to be accessible for making welded joints at the clamping member 10.

The clamping member 10 of Figs. 5 and 6 is tubular with tags 13 which extend sideways and are welded together in the finished lamp, which tags are present at a first and a second circumference portion 11 and 12, respectively. Opposite these tags 13, the member has a hairpin-shaped connection portion 14 which projects laterally. In the drawing, the tube has such tags 13 and such a connection portion 14 at each of its two ends 15, 16. Between its ends 15, 16, the clamping member has a sector 17 with a cylindrical surface substantially all around.

The clamping member of Fig. 7 has the shape of a tube 110 with a set 113, 114 of tongues, which are bent inwards so as to face away from the discharge vessel, at a first 111 and a second end portion 112.

Claims

1. A capped high-pressure discharge lamp comprising

   a discharge vessel (1) having a first (2) and a second (3) neck-shaped portion facing one

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The lamp has a lamp cap 30 of insulating material which is connected to the discharge vessel 1.

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Claims

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another and having seals through which respective first (4) and second (5) current supply conductors are passed to a pair of electrodes (6) positioned in the discharge vessel,

a metal clamping member (10) which clamps around the first neck-shaped portion (2) of the discharge vessel (1),

a metal fixation member (20) provided with first tongues (21) which are connected to the clamping member (10) and with second tongues (22) having free ends (23),

a lamp cap (30) of insulating material connected to the discharge vessel (1), which lamp cap (30) at a side (31) facing the discharge vessel (1) has a first, circumferential cavity (32) in which the fixation member (20) is secured and a second, central cavity (33) in which the first neck-shaped portion (2) is included, which central cavity (33) affords access to a side (34) of the lamp cap (30) facing away from the discharge vessel (1), where the lamp cap carries a first (35) and a second (36) contact member to which the first (4) and second (5) current supply conductors, respectively, are connected;

characterized in that

the lamp cap (30) at its side (31) facing the discharge vessel (1) has a third cavity (37) with access to the side (34) facing away from the discharge vessel, which cavity is separated from the first (32) and the second (33) cavity and through which a connection conductor (7) is passed which runs from the second contact member (36) along the discharge vessel (1) to the second current supply conductor (5), which connection conductor (7) is surrounded alongside the discharge vessel by an insulator (8) extending into the third cavity (37);

the second tongues (22) of the fixation member (20) face the discharge vessel (1) and lie with their free ends (23) in the first cavity (32) with clamping fit, the first tongues (21) being welded to the clamping member (10).

2. A capped high-pressure discharge lamp as claimed in Claim 1, characterized in that the second tongues (22) are bent back alongside the fixation member (20).

3. A capped high-pressure discharge lamp as claimed in Claim 1 or 2, characterized in that the first cavity (32) is formed so as to restrict rotation of the fixation member (20).

4. A capped high-pressure discharge lamp as claimed in Claim 3, characterized in that the first cavity (32) has a recess (42) in which a third tongue (24) of the fixation member (20) is enclosed.

5. A capped high-pressure discharge lamp as claimed in Claim 1, 2 or 3, characterized in that a depth stop for the fixation member (20) is present in the first cavity (32).

6. A capped high-pressure discharge lamp as claimed in Claim 5, characterized in that the fixation member (20) has at least one tag (25) which is situated between two second tongues (22) and which abuts in the cavity (32).

7. A capped high-pressure discharge lamp as claimed in Claim 1, 2 or 3, characterized in that the clamping member (10) is tubular with tags (13) which extend sideways and are welded together, which tags are present at a first (11) and a second (12) circumference portion, with an opposing hairpin-shaped connection portion (14) which projects sideways.

8. A capped high-pressure discharge lamp as claimed in Claim 7, characterized in that the tubular clamping member (10) has a pair of tags (13) and a hairpin-shaped connection portion (14) at each of its two ends (15, 16).

9. A capped high-pressure discharge lamp as claimed in Claim 1, 2 or 3, characterized in that the lamp cap (30) has a screening cap (41) at its side (31) facing the discharge vessel (1).

10. A capped high-pressure discharge lamp as claimed in Claim 1, 2 or 3, characterized in that the clamping member (110) is tubular and comprises at a first (111) and a second end portion (112) respective sets (113, 114) of tongues which are bent inwards so as to face away from the discharge vessel (1).

Patentansprüche

1. Gesockelte Hochdruckentladungslampe mit

einem Entladungskolben (1) mit einem ersten (2) und einem zweiten (3) halsförmigen und einander zugewandten Anteil und mit Abdichtungen, durch die betreffende erste (4) und zweite (5) Stromzuführungsleiter einem im Entladungskolben angeordneten Elektrodenpaar (6) zugeleitet werden,

mit einem Metallklemmelement (10), das sich um den ersten halsförmigen Anteil (2) des Entladungskolbens (1) klemmt,

mit einem Metallbefestigungselement (20) mit ersten Zungen (21), die mit dem Klemmelement (10) verbunden sind, und mit zweiten Zungen (22) mit freien Enden (23),

mit einem mit dem Entladungskolben ver-

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bundenen Lampensockel (30) aus Isoliermaterial, der an einer dem Entladungskolben (1) zugewandten Seite (31) einen ersten kreisförmigen Hohlraum (32), in dem das Befestigungselement (20) befestigt ist, und einen zweiten mittleren Hohlraum (33) enthält, in dem sich der erste halsförmige Anteil (2) befindet, wobei der mittlere Hohlraum (33) Zutritt zu einer vom Entladungsgefäß (1) abgewandten Seite (34) des Lampensockels (30) gewährt, wobei der Lampensockel ein erstes (35) und ein zweites (36) Kontaktelement trägt, mit denen die ersten (4) bzw. zweiten (5) Stromzuführungsleiter verbunden sind, dadurch gekennzeichnet, daß der Lampensockel (30) an seiner dem Entladungskolben (1) zugewandten Seite einen dritten Hohlraum (37) mit Zutritt zu dem vom Entladungskolben abgewandten Seite (34) hat, dieser Hohlraum vom ersten (32) und vom zweiten (33) Hohlraum getrennt ist, und durch den sich ein Verbindungsleiter (7) erstreckt, der vom zweiten Kontaktelement (36) durch den Enfladungskolben (1) nach dem zweiten Stromzuführungsleiter (5) führt, und dieser Verbindungsleiter (7) an der Seite des Entladungskolbens von einem Isolator (8) umgeben ist, der sich in den dritten Hohlraum (37) erstreckt,

daß die zweiten Zungen (22) des Befestigungselements (20) dem Entladungsgefäß (1) zugewandt sind und mit ihren freien Enden (23) im ersten Hohlraum (32) mit Klemmpassung liegen, wobei die ersten Zungen (21) mit dem Klemmelement (10) verschweißt sind.

2. Gesockelte Hochdruckentladungslampe nach Anspruch 1, dadurch gekennzeichnet, daß die zweiten Zungen (22) längs des Befestigungselements (20) zurückgebogen sind.

3. Gesockelte Hochdruckentladungslampe nach Anspruch 1 oder 2, dadurch gekennzeichnet, daß der erste Hohlraum (32) zum Beschränken der Drehung des Befestigungselements (20) gebildet ist.

4. Gesockelte Hochdruckentladungslampe nach Anspruch 3, dadurch gekennzeichnet, daß der erste Hohlraum (32) eine Ausnehmung (42) aufweist, in die eine dritte Zunge (24) des Befestigungselements (20) aufgenommen ist.

5. Gesockelte Hochdruckentladungslampe nach Anspruch 1, 2 oder 3, dadurch gekennzeichnet, daß für das Befestigungselement (20) im ersten Hohlraum (32) ein Tiefenanschlag vorgesehen ist.

6. Gesockelte Hochdruckentladungslampe nach Anspruch 5, dadurch gekennzeichnet, daß das Befestigungselement (20) wenigstens eine Zunge (25) enthält, die sich zwischen zwei zweiten Zungen (22) befindet und im Hohlraum (32) anläuft.

7. Gesockelte Hochdruckentladungslampe nach Anspruch 1, 2 oder 3, dadurch gekennzeichnet, daß das Klemmelement (10) zylinderförmig mit Zungen (13) ist, die sich seitlich erstrecken und miteinander verschweißt sind, und diese Zungen sich auf einem ersten (11) und einem zweiten (12) Umfangsanteil mit einem gegenüberliegenden haarnadelförmigen Anteil (14) befinden, der sich seitwärts erstreckt.

8. Gesockelte Hochdruckentladungslampe nach Anspruch 7, dadurch gekennzeichnet, daß das zylinderförmige Klemmelement (10) an jedem seiner beiden Enden (15, 16) ein Zungenpaar (13) und einen haarnadelförmigen Anteil (14) enthält.

9. Gesockelte Hochdruckentladungslampe nach Anspruch 1, 2 oder 3, dadurch gekennzeichnet, daß der Lampensockel (30) auf der dem Entladungsgefäß (1) zugewandten Seite (31) eine Abschirmkappe (41) aufweist.

10. Gesockelte Hochdruckentladungslampe nach Anspruch 1, 2 oder 3, dadurch gekennzeichnet, daß das Klemmelement (110) zylinderförmig ist und auf einem ersten (111) und auf einem zweiten (112) Anteil jeweilige Zungenpaare (113, 114) enthält, die nach innen gebogen sind, damit sie vom Entladungsgefäß abstehen.

Revendications

1. Lampe à décharge à haute pression à culot comportant

un récipient à décharge (1) présentant une première (2) et une seconde (3) partie en forme de col l'une faisant face à l'autre et présentant des fermetures par lesquelles passe un propre premier (4) respectivement second (5) conducteur d'alimentation de courant s'étendant vers une paire d'électrodes (6) positionnée dans le récipient à décharge,

un élément de serrage métallique (10) qui est serré autour de la première partie en forme de col (2) du récipient à décharge (1),

un élément de fixation métallique (20) muni de premières languettes (21) qui sont connectées à l'élément de serrage 10, et de deuxièmes languettes (22) présentant une extrémité libre (23),

un culot de lampe (30) constitué de matériau isolant connecté au récipient à décharge (1), ledit culot de lampe (30) présentant d'un côté (31) faisant face au récipient à décharge (1) une cavité circonférentielle (32) dans laquelle est fixé l'élément de fixation (20), et une deuxième cavité centrale (33) dans laquelle est incorporée la première partie en forme de col (2), ladite cavité centrale (33) donnant accès à un côté (34) du culot de lampe (30) situé à l'opposé du récipient à décharge (1), où le culot de lampe porte un premier (35) et un second (36) élément de contact auquel est connecté le premier (4) respectivement le second (5) conducteur d'alimentation de courant.

caractérisée en ce que

le culot de lampe (30) de son côté (31) faisant face au récipient à décharge (1) présente une troisième cavité (37) donnant accès au côté (34) situé à l'opposé du récipient à décharge, ladite cavité étant séparée de la première (32) et de la deuxième (33) cavité, et par laquelle passe un conducteur de connexion (7) s'étendant du second élément de contact (36), suivant le récipient à décharge (1), vers le second conducteur d'alimentation de courant (5), ledit conducteur de connexion (7) étant entouré, du côté latéral du récipient à décharge, d'un isolateur (8) s'étendant dans la troisième cavité (37);

les deuxièmes languettes (22) de l'élément de fixation (20) font face au récipient à décharge (1) et, de façon serrée, elles se situent avec leurs extrémités libres (23) dans la première cavité (32), les premières languettes (21) étant soudées à l'élément de serrage (10).

2. Lampe à décharge à haute pression à culot selon la revendication 1, caractérisée en ce que les deuxièmes languettes (22) sont pliées en arrière du côté latéral de l'élément de fixation (20).

3. Lampe à décharge à haute pression à culot selon la revendication 1 ou 2, caractérisée en ce que la première cavité (32) est conçue de façon à limiter la rotation de l'élément de fixation (20).

4. Lampe à décharge à haute pression à culot selon la revendication 3, caractérisée en ce que la première cavité (32) présente un évidement (42) dans lequel est renfermée une troisième languette (24) de l'élément de fixation (20).

5. Lampe à décharge à haute pression à culot selon la revendication 1, 2 ou 3, caractérisée en ce qu'une butée de profondeur pour l'élément de fixation (20) est présente dans la première cavité (32).

6. Lampe à décharge à haute pression à culot selon la revendication 5, caractérisée en ce que l'élément de fixation (20) présente au moins une cosse (25) située entre deux deuxièmes languettes (22) et s'appuyant dans la cavité (32).

7. Lampe à décharge à haute pression à culot selon la revendication 1, 2 ou 3, caractérisée en ce que l'élément de serrage (10) est tubulaire présentant des cosses (13) qui s'étendent latéralement et qui sont soudées les unes aux autres, lesdites cosses étant présentes à une première (11) et à une seconde (12) partie circonférentielle, et en ce qu'il présente une partie de connexion en forme d'épingle à cheveux opposée (14) qui s'étend latéralement.

8. Lampe à décharge à haute pression à culot selon la revendication 7, caractérisée en ce que l'élément de serrage tubulaire (10) présente une paire de cosses (13) et une partie de connexion en forme d'épingle à cheveux (14) à chacune de ses deux extrémités (15, 16).

9. Lampe à décharge à haute pression à culot selon la revendication 1, 2 ou 3, caractérisée en ce que le culot de lampe (30) présente un capot de blindage (41) de son côté (31) faisant face au récipient à décharge (1).

10. Lampe à décharge à haute pression à culot selon la revendication 1, 2 ou 3, caractérisée en ce que l'élément de serrage (110) est tubulaire et comporte à une première (111) et à une seconde partie terminale (112) des propres séries (113, 114) de languettes qui sont pliées à l'intérieur de façon à s'éloigner du récipient à décharge (1).