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(54) **Articulated support, particularly for lamps**

(57) An articulated support (1) for lamps has a supporting portion (2) on which a spotlight (50) can be pivoted and can rotate about a first pivoting axis (100). A coupling member (5) is pivoted to the supporting portion (2), about

a second pivoting axis (200) that lies transversely to the first pivoting axis, and can be pivoted to a supporting means and can rotate about a third pivoting axis (200) that lies transversely to the second pivoting axis (200).

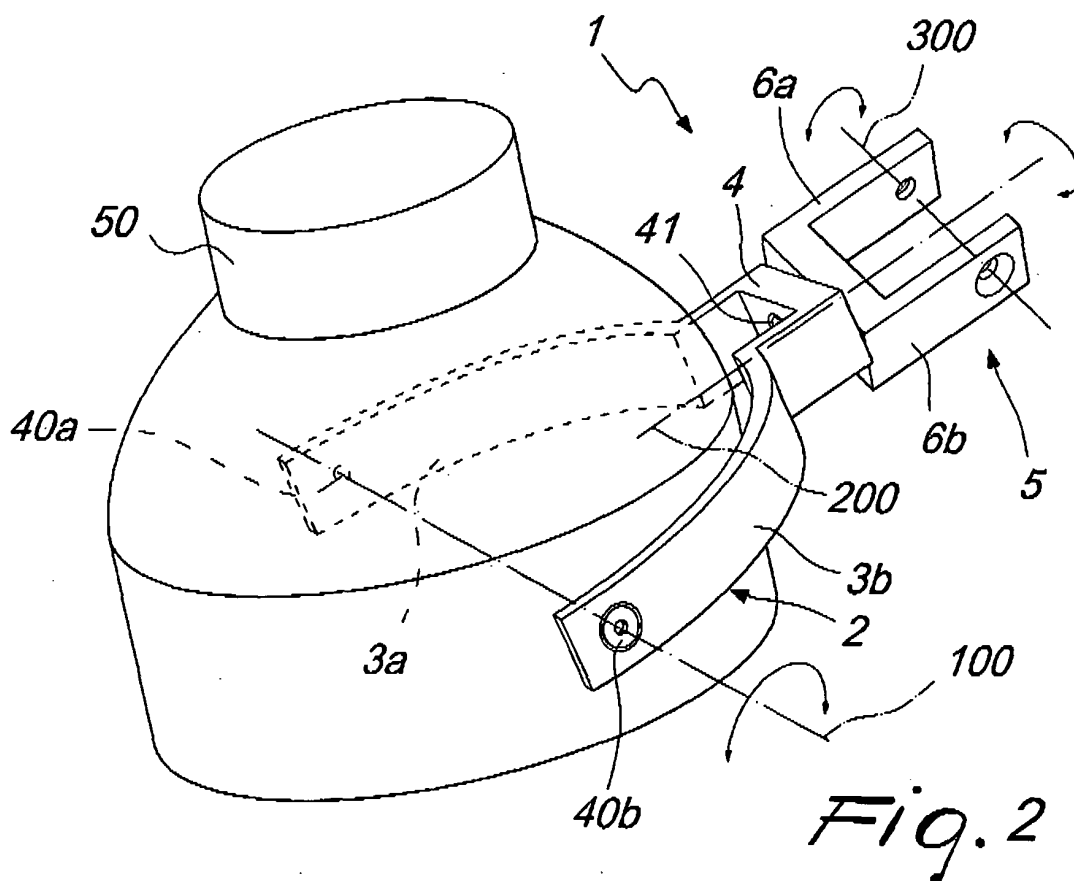


Fig. 2

Description

[0001] The present invention relates to an articulated support, particularly for lamps, which allows a broad adjustment of the direction of spotlights.

[0002] As is known, there are various kinds of articulated support that allow to adjust the direction of spotlights both in surface-mounted lamps, recessed in false ceilings or placed within appropriately provided compartments formed in ceilings, as well as in those to be installed on brackets, poles or lattice girders.

[0003] A feature shared by commercially available articulated supports is that they usually work on two independent axes in order to reach the targeting that is necessary for spotlighting requirements.

[0004] Specifically, those articulated supports generally offer the possibility to orient the spotlight with respect to two substantially parallel axis or with respect to two mutually perpendicular axes.

[0005] This prerogative leads to a limited possibility of orientation and particularly to the impossibility to employ a further articulation, which might allow to go around protruding obstacles, such as for example frames, moldings or grooves.

[0006] Another drawback arises from the fact that in most existing articulated supports the structure that constitutes them, and that must support the spotlight, generally lies above the spotlight, being affected by considerable and repeated heatings which can compromise its durability over time.

[0007] The aim of the invention is to solve the problems described above, providing an articulated support, particularly for lamps, that allows to aim a spotlight on three separate rotation axes.

[0008] Within the scope of this aim, a particular object of the invention is to provide an articulated support in which the spotlight can be oriented on three axes of rotation substantially at 360°.

[0009] A further object of the invention is to provide an articulated support in which the targeting positions of the spotlight can be adjusted and locked independently.

[0010] A further object of the invention is to provide an articulated support that allows to go around front or lateral obstacles and is capable of protruding or retracting as a function of the requirements and of the context in which it is installed.

[0011] A further object of the invention is to provide an articulated support that allows to apply multiple spotlights simultaneously or as a battery and is suitable to support also any power supply of the spotlights.

[0012] A further object of the invention is to provide an articulated support that is simple to manufacture and is advantageous from a purely economic standpoint.

[0013] This aim and these and other objects, which will become better apparent hereinafter, are achieved by an articulated support, particularly for lamps, comprising a supporting portion on which at least one spotlight can be pivoted about a first pivoting axis, characterized in that

it comprises a coupling member that is pivoted to said supporting portion, about a second pivoting axis that lies transversely to said first pivoting axis, said coupling member being pivotable to a supporting means about a third pivoting axis that lies transversely to the second pivoting axis.

[0014] Further characteristics and advantages will become better apparent from the description of a preferred but not exclusive embodiment of an articulated support according to the invention, illustrated by way of non-limiting example in the accompanying drawings, wherein:

Figure 1 is a perspective view of an articulated support according to the invention;

Figure 2 is a perspective view of an articulated support device according to the invention, to which a spotlight is applied;

Figure 3 is a perspective view of an articulated support according to the invention, to which a spotlight supporting ring is applied.

[0015] With reference to the cited figures, the articulated support, generally designated by the reference numeral 1, comprises a supporting portion 2, to which it is possible to pivot directly one or more spotlights 50 about a first pivoting axis 100 or one or more spotlight supporting rings 60 suitable to support the spotlights 50.

[0016] More particularly, the supporting portion 2 is constituted by at least one fork that is formed by two arms 3a and 3b, which are joined monolithically to a base member 4.

[0017] The two arms 3a and 3b are shaped so as to form a recess that is adapted to accommodate the spotlight 50, optionally provided with its power supply, or the spotlight supporting ring 60, which are pivoted, at their free ends, at the first pivoting axis 100 by virtue of screws 40a and 40b, pivots, rivets or another suitable means.

[0018] According to the invention, the articulated support 1 comprises a coupling member 6, which is pivoted to the supporting portion 2 about a second pivoting axis 200, which lies transversely to the first pivoting axis 100 and can be pivoted to a supporting means about a third pivoting axis 300, which lies transversely to the second pivoting axis 200.

[0019] Specifically, the coupling member 5 is formed by a bracket, which is substantially U-shaped and is pivoted to the base member 4 about the second pivoting axis 200, for example by means of a screw 41, a bolt or another suitable means.

[0020] The free ends 6a and 6b of the bracket, whose length can be set as a function of the specific requirements and of the installation context, can be pivoted, at the third pivoting axis 300, to a supporting means, such as for example a wall, an upright or another fixed structure, by means of screws, pivots, rivets or other similar systems.

[0021] According to a further embodiment, not shown in the accompanying figures, the bracket can be replaced

by a component with equivalent technical characteristics, such as for example a tubular member that has the shape of a parallelepiped, cylinder or cone.

[0022] The articulated support 1 is preferably provided with a locking means, which allows to selectively lock the rotation of its components about the three pivoting axes 100, 200 and 300, allowing to independently orient the spotlight 50 or the spotlight supporting ring 60, on the three axes arranging them in the best way.

[0023] The locking means is of the friction type and utilizes in its operation the friction that, also by virtue of the material used in construction, arises between the components of the articulated support 1 during rotations.

[0024] In this regard, the articulated support 1 is made of metal, synthetic material, or other materials that have an adequate friction coefficient, in addition to the necessary strength.

[0025] As an alternative, the locking means can be constituted by motorized devices, with an electrical, hydraulic or pneumatic movement, equipped with an orientation and positioning means and with safety locking systems.

[0026] The operation of the device according to the invention is as follows.

[0027] The articulated support 1 is installed by pivoting the coupling member 5 to the supporting means, about the third pivoting axis 300, and by pivoting a spotlight 50 or a spotlight supporting ring 60 on which a spotlight 50 is subsequently fixed, to the supporting portion 2, about the first pivoting axis 100.

[0028] Subsequently, depending on the orientation that must be imparted to the spotlight 50, or to the spotlight supporting ring 60, the rotation of the spotlight 50 or of the spotlight supporting ring 60 with respect to the supporting portion 2, the rotation of the coupling member 5 with respect to the supporting means, and the rotation of the supporting portion 2 with respect to the coupling member 5 are adjusted and locked by means of the locking means.

[0029] In practice it has been found that the articulated support according to the invention fully achieves the intended aim, since it allows to target a spotlight on three separate rotation axis substantially at 360°.

[0030] The articulated support according to the invention, which is adapted to simultaneously support even more than one spotlight, allows to adjust and lock independently the targeting positions, overcoming the obstacles that are present.

[0031] This application claims the priority of Italian Patent Application No. VI2007A000291, filed on October 31, 2007, the subject matter of which is incorporated herein by reference.

Claims

1. An articulated support, particularly for lamps, comprising a supporting portion on which at least one

spotlight can be pivoted about a first pivoting axis, **characterized in that** it comprises a coupling member that is pivoted to said supporting portion, about a second pivoting axis that lies transversely to said first pivoting axis, said coupling member being pivotable to a supporting means about a third pivoting axis that lies transversely to the second pivoting axis.

2. The articulated support according to the preceding claim, **characterized in that** it comprises a locking means adapted to selectively lock the rotation about said three pivoting axes.

3. The articulated support according to one or more of the preceding claims, **characterized in that** said locking means is of the friction type.

4. The articulated support according to one or more of the preceding claims, **characterized in that** said locking means comprises a plurality of motorized devices.

5. The articulated support according to one or more of the preceding claims, **characterized in that** said locking means comprises an orientation and positioning means.

6. The articulated support according to one or more of the preceding claims, **characterized in that** said supporting portion comprises at least one fork that forms a recess adapted to accommodate said spotlight.

7. The articulated support according to one or more of the preceding claims, **characterized in that** said fork comprises two arms which are joined monolithically to a base member, which is pivoted to said coupling member about said second pivoting axis, said spotlight being pivotable at the free ends of said arms about said first pivoting axis.

8. The articulated support according to one or more of the preceding claims, **characterized in that** said coupling member comprises a bracket that is substantially U-shaped and is pivoted to said base member about said second pivoting axis, the free ends of said bracket being pivotable to said supporting means about said third pivoting axis.

9. The articulated support according to one or more of the preceding claims, **characterized in that** said coupling member comprises a tubular member, which is pivoted to said base member about said second pivoting axis, the free end of said tubular member being pivotable to said supporting means about said third pivoting axis.

10. The articulated support according to one or more of

the preceding claims, **characterized in that** it comprises a spotlight support ring, which is pivoted to said free ends of said arms about said first pivoting axis, said spotlight being associable with said spotlight supporting ring.

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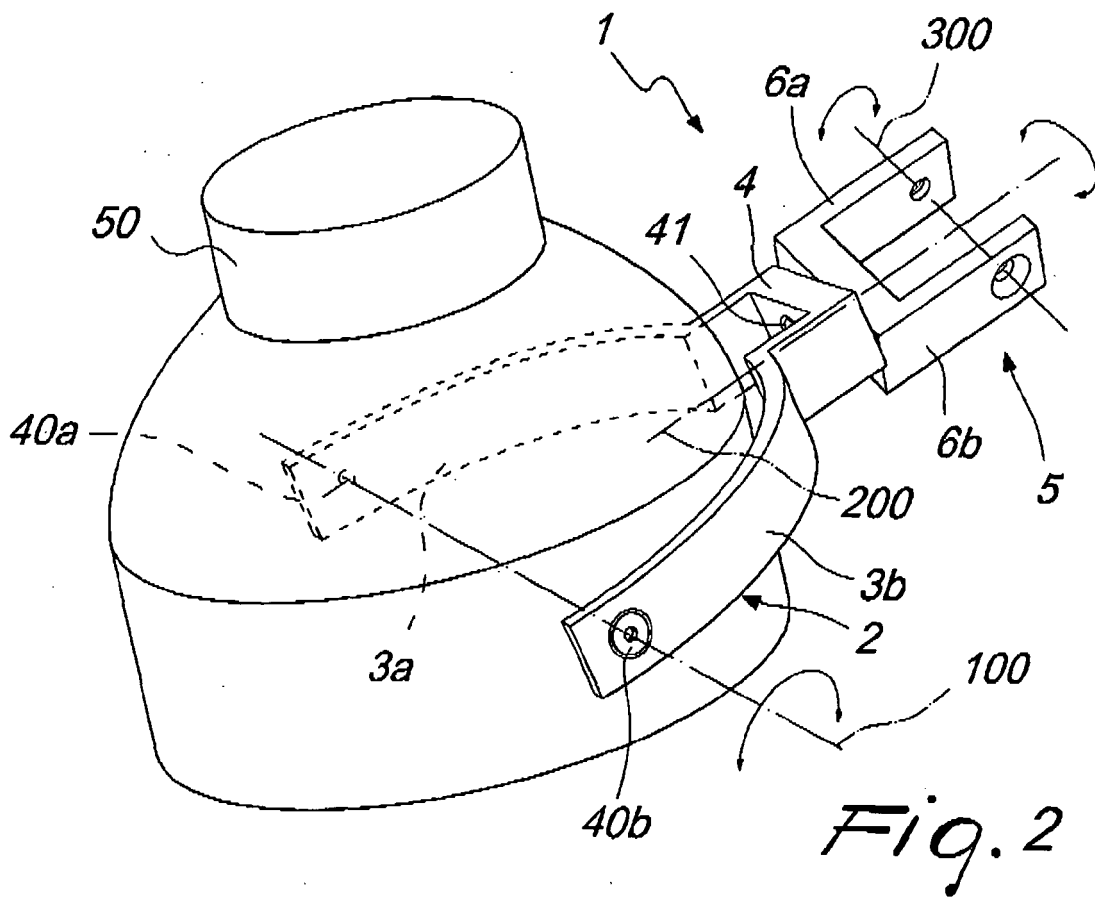
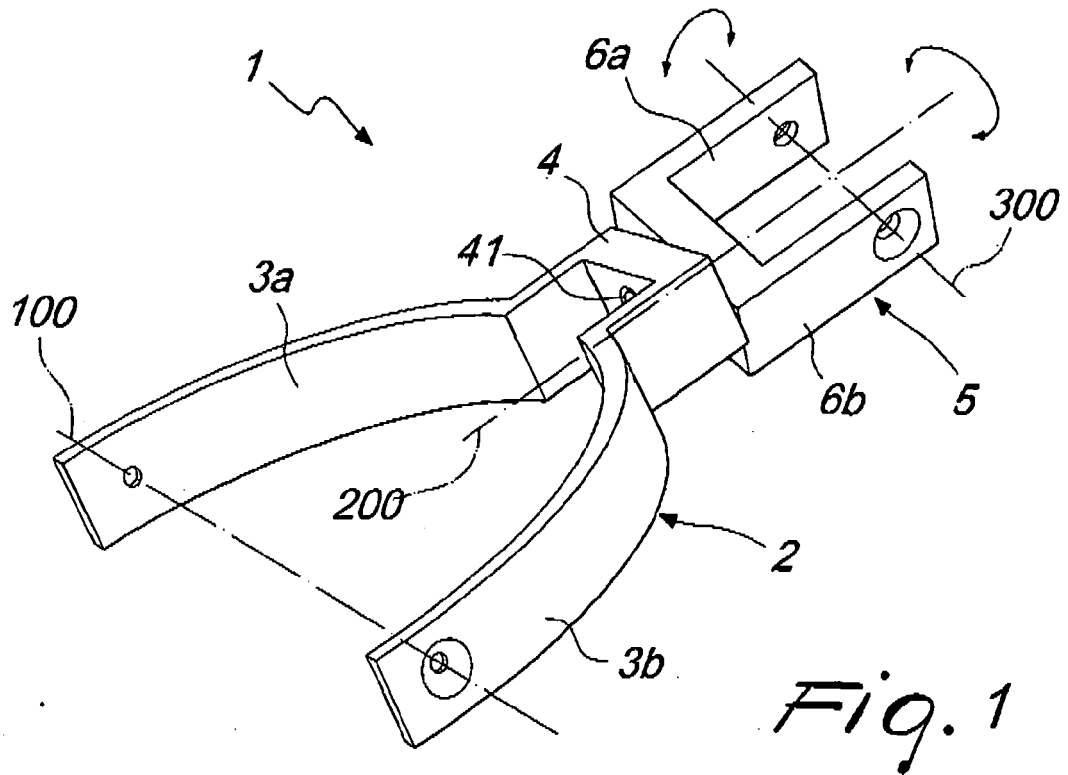
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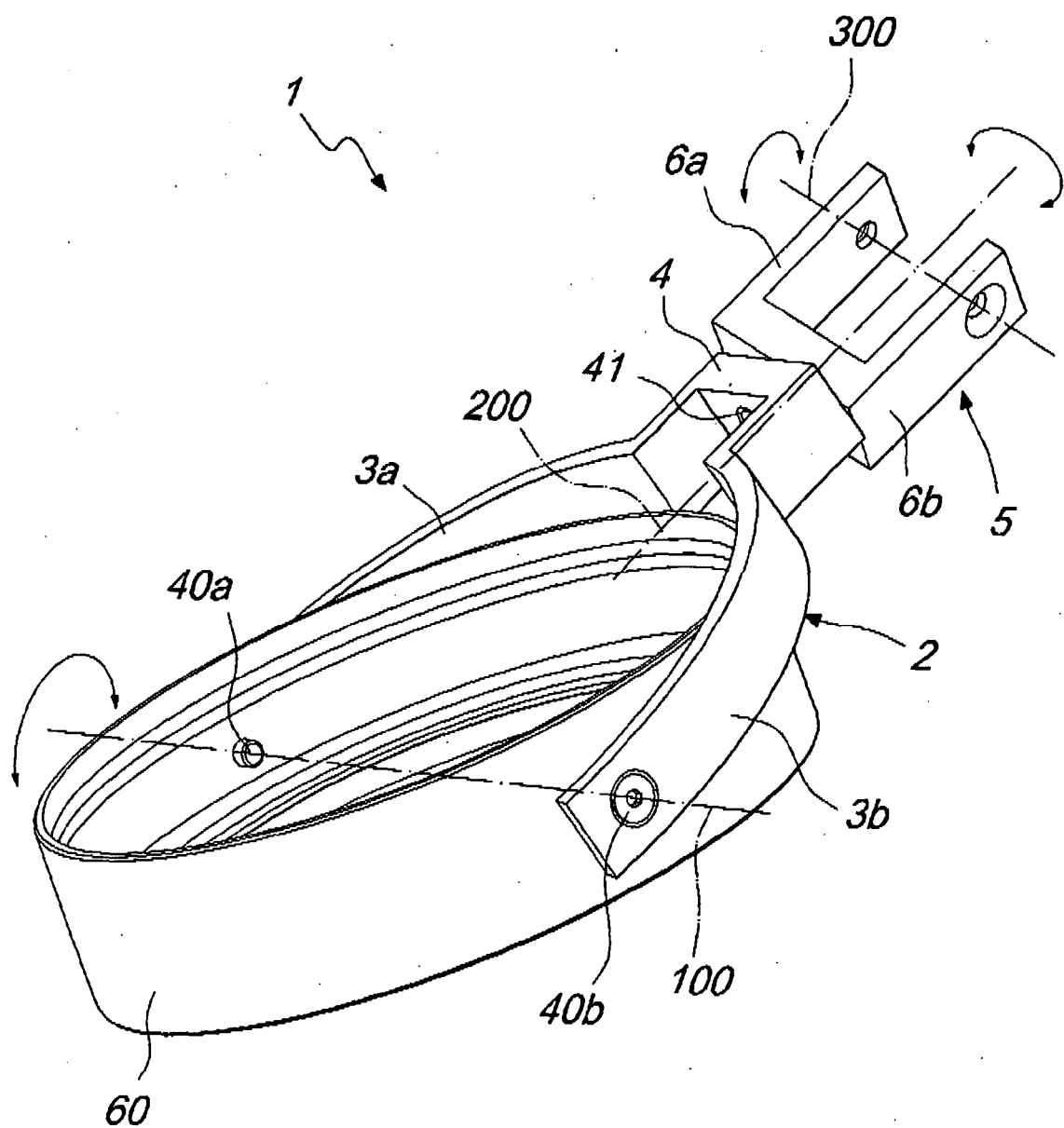


Fig. 3



EUROPEAN SEARCH REPORT

Application Number
EP 08 01 8946

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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			F21V
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 9 February 2009	Examiner Arboreanu, Antoniu
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			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 08 01 8946

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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09-02-2009

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REFERENCES CITED IN THE DESCRIPTION

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