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(11)

EP 1 126 214 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
22.08.2001 Bulletin 2001/34

(51) Int Cl.7: **F21V 21/14**

(21) Application number: **01200479.2**

(22) Date of filing: **12.02.2001**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR**
Designated Extension States:
AL LT LV MK RO SI

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(30) Priority: **16.02.2000 IT MI000086 U**

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(54) **Suspended lighting apparatus**

(57) A suspended lighting apparatus (10) comprises a spotlight (11) provided with a light source (12), and a plurality of slender suspension elements (13, 14), where at least two of the slender suspension elements (13, 14)

function as a retention system for a cross member (16), and where the spotlight (11) is suspended from a fork (15) which is connected to the cross member (16) in such a way that the spotlight (11) is free to turn about a substantially vertical axis.

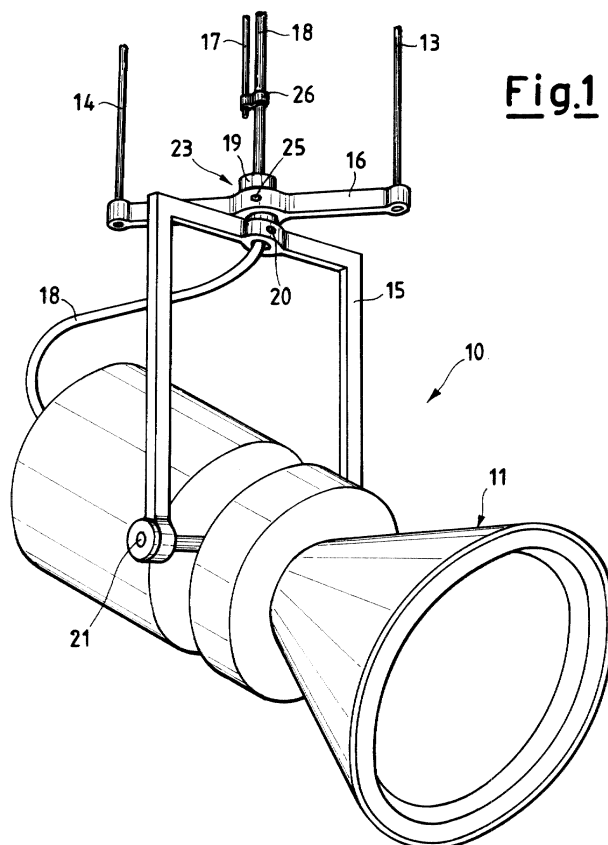


Fig.1

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Description

[0001] The subject of the present invention is a suspended lighting apparatus.

[0002] As is known, various types of lighting apparatus exist that can be suspended from a wall or a ceiling, both for domestic use and for use in other environments.

[0003] There also exist types of apparatus that can be adjusted in their extension in the vertical direction, for example by means of complex pantograph systems.

[0004] Even though the apparatus of the type described above is able to perform the function for which it is designed, there is still room for a number of interesting and important improvements.

[0005] A purpose of the present invention is therefore to provide a suspended lighting apparatus in which the spotlight can be oriented as desired so that it can be appropriately positioned according to the particular lighting requirements.

[0006] Another purpose of the present invention is to provide a suspended lighting apparatus which can be installed in a simple and economical way, i.e., without having to resort to costly materials or complex technologies.

[0007] These and other purposes are achieved by a suspended lighting apparatus, according to Claim 1, to which the reader is referred for reasons of brevity.

[0008] Further characteristics of the present invention are moreover defined in the subsequent claims.

[0009] Further purposes and advantages of the present invention will emerge clearly from the ensuing description and from the annexed drawings, which are provided purely to furnish explanatory and non-limiting examples, and in which:

- Figure 1 is a perspective view of a suspended lighting apparatus according to the present invention;
- Figure 2 is a view of the lighting apparatus of Figure 1 in one first possible configuration of use;
- Figure 3 is a view of the lighting apparatus of Figure 1 in one second possible configuration of use;
- Figure 4 is a view of the lighting apparatus of Figure 1 in one third possible configuration of use; and
- Figure 5 is a cross-sectional view of a detail of the articulated-joint system of the apparatus illustrated in the previous figures.

[0010] With particular reference to the aforementioned figures, the suspended lighting apparatus according to the invention is designated, as a whole, by the reference number 10.

[0011] The suspended lighting apparatus 10 comprises a spotlight 11 provided with a light source 12, and a plurality of slender suspension elements 13 and 14, which, in the example shown in the figures, are steel cables.

[0012] The steel cables 13 and 14 function as a retention system for a cross member 16, and the spotlight

11 is, in turn, suspended from a fork 15, shaped like an upturned U, which is connected to the cross member 16 in such a way that it can turn.

[0013] The lighting apparatus 10 is provided with a further slender suspension element 17 which, in a substantially central position, accompanies the electric lead 18 of the apparatus 10 so as to keep it tensioned.

[0014] In particular, the electric lead 18 is connected to the slender suspension element 17 by means of clamps 26.

[0015] According to alternative embodiments of the invention, the slender suspension elements 13, 14 and 17 can be obtained by means of steel cables, as already specified, or else by means of thin metal tubes.

[0016] Figure 5 illustrates the hooking system for the leads 13, 14, obtained by means of balls 27 inserted into recesses or holes 28.

[0017] The lighting apparatus 10 also has a threaded element 19 which is slotted in the cross member 16 to connect it to the fork 15 in such a way that it is free to turn.

[0018] In addition, the fork 15 is provided with a safety locking element 20, for example a grub screw, which engages with the threaded element 19, the purpose of the arrangement being to configure an articulated joint 23.

[0019] Also provided is a grub screw 25, which makes it possible to block reciprocal rotation of the threaded element 19 and the cross member 16.

[0020] The spotlight 11 of the lighting apparatus 10 can also turn with respect to the fork 15 thanks to two hinges 21 set on the sides of the spotlight 11 itself.

[0021] The lighting apparatus 10 is also provided with a device 22 for fast height-adjustment of the position of the apparatus, by adjusting the vertical development of the cables 13, 14 and 17.

[0022] Operation of the lighting apparatus according to the invention is illustrated in what follows.

[0023] The height from the floor of the apparatus can be adjusted by means of the device 22, by releasing the steel cables 13, 14 and 17 to increase or decrease their vertical development.

[0024] In addition, the fork 15 can be made to rotate about a substantially vertical axis, by means of the articulated joint 23, consequently causing also the spotlight 11 with its light source 12 to rotate.

[0025] Finally, the spotlight 11 can be made to rotate about a substantially horizontal axis, by means of the hinges 21.

[0026] The above movements reveal the particular and advantageous flexibility of use guaranteed by the present invention.

[0027] It should be noted that the inventive ideas presented herein may of course be applied also to spotlights having a shape that is different from the one illustrated and represented by way of example.

[0028] The characteristics, as well as the advantages, of the suspended lighting apparatus according to the present invention emerge clearly from the foregoing de-

scription.

[0029] Finally, it is clear that numerous variations may be made to the suspended lighting apparatus, which forms the subject of the present invention, without thereby departing from the principles of novelty inherent in the inventive idea.

[0030] In the practical implementation of the invention, the materials, shapes and dimensions of the items illustrated may be any whatsoever according to the requirements, and the said items may be replaced with others that are technically equivalent.

8. A lighting apparatus (10) according to Claim 1, characterized in that said slender suspension elements (13, 14, 17) are made using steel cables.

5 9. A lighting apparatus (10) according to Claim 1, characterized in that said slender suspension elements (13, 14, 17) are made using slender metal tubes.

Claims

1. A suspended lighting apparatus (10) comprising a spotlight (11) provided with a light source (12), characterized in that it comprises a plurality of slender suspension elements (13, 14), where at least two of the aforesaid slender suspension elements (13, 14) function as a retention system for a cross member (16), and where the aforesaid spotlight (11) is suspended from a fork (15) by means of an articulation joint (23) which enables rotation thereof about a substantially vertical axis.

2. A lighting apparatus (10) according to Claim 1, characterized in that it is provided with a further slender suspension element (17), which, in a substantially central position, accompanies the electric lead (18) of the aforesaid apparatus (10) in order to keep the lead tensioned.

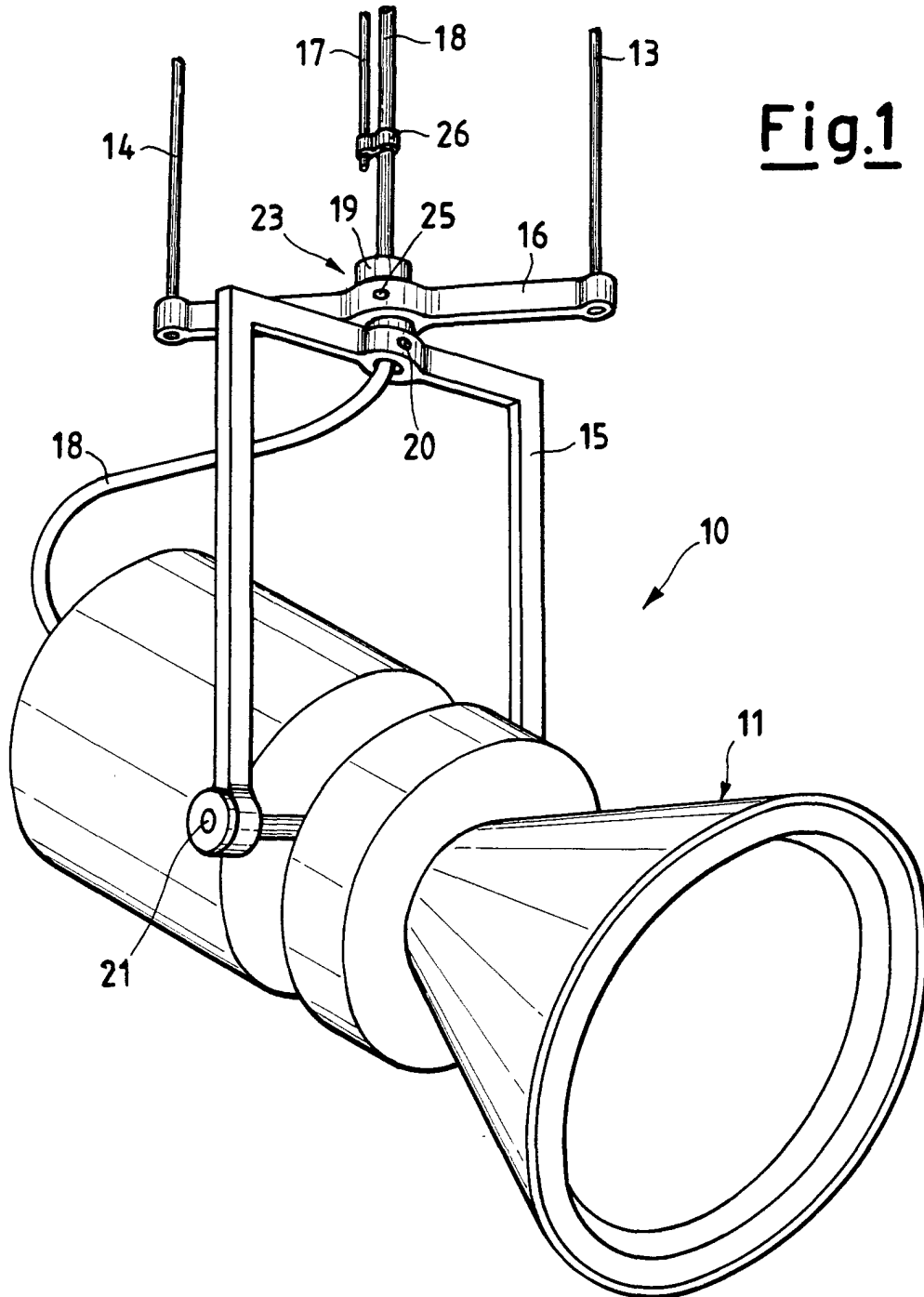
3. A lighting apparatus (10) according to Claim 1, characterized in that it is provided with a threaded element (19) that slots into the aforesaid cross member (16) in such a way as to connect it, so that it is free to turn, to the aforesaid fork (15).

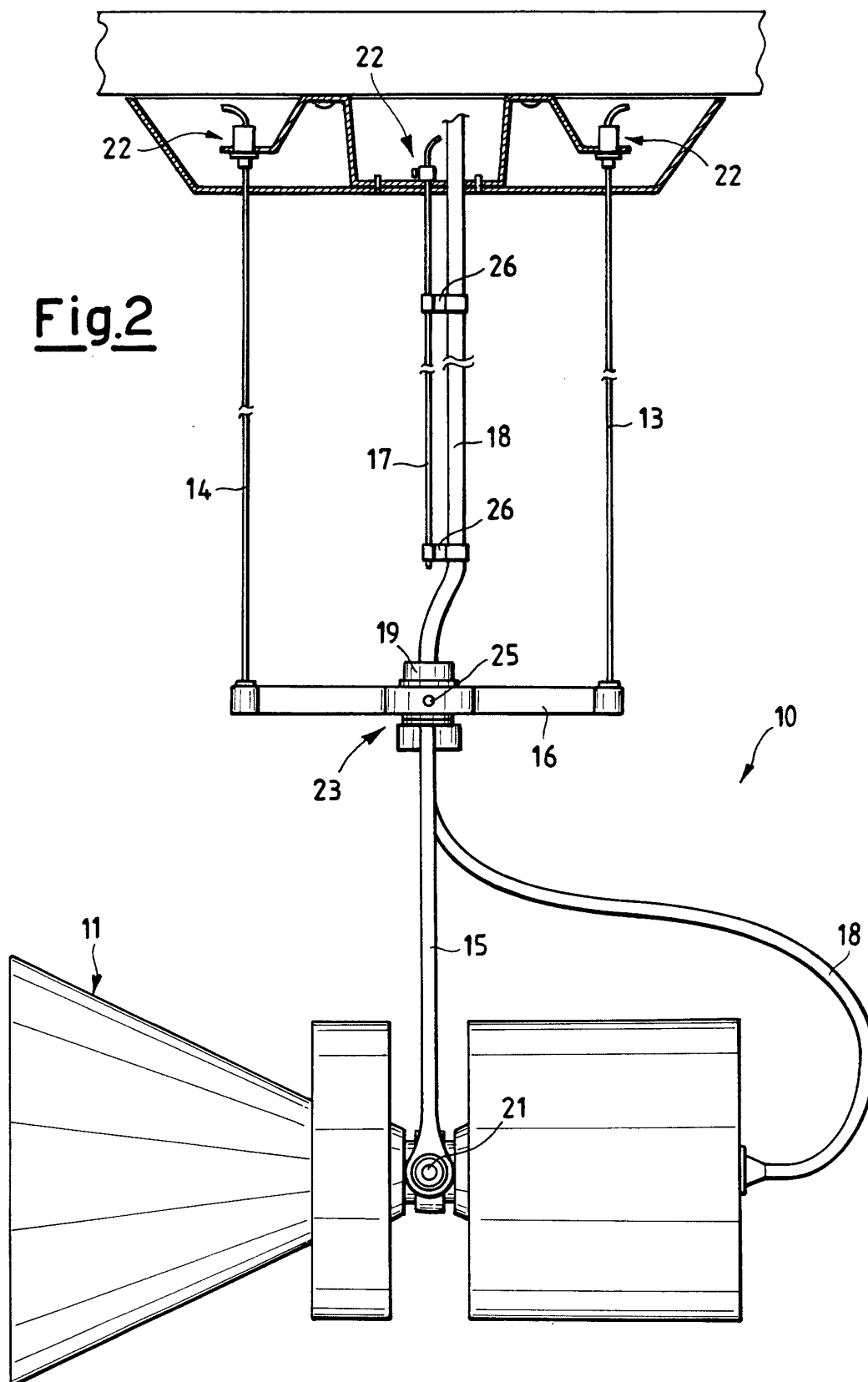
4. A lighting apparatus (10) according to Claim 3, characterized in that the aforesaid cross member (16) is provided with a locking element (25) which engages with the aforesaid threaded element (19).

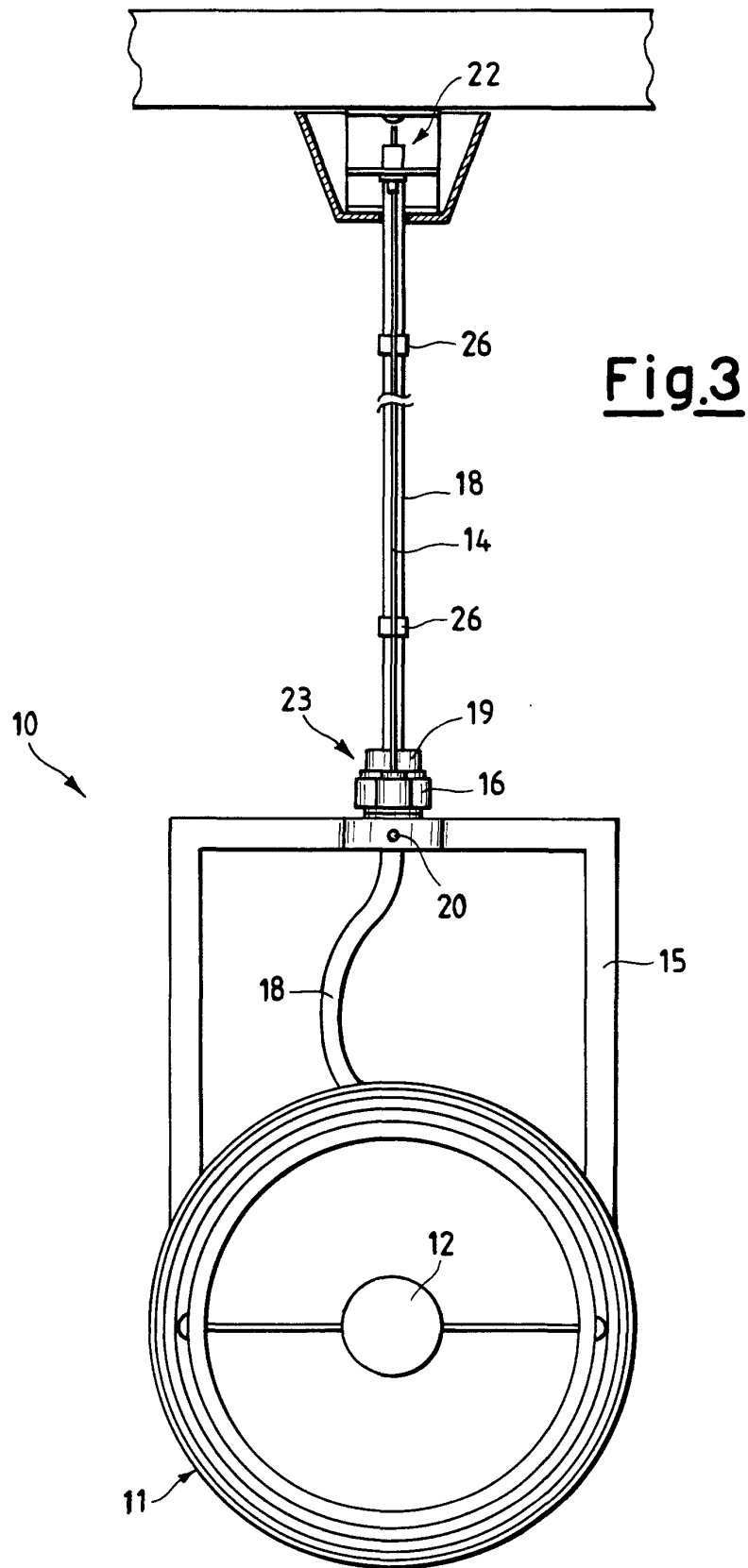
5. A lighting apparatus (10) according to Claim 3, characterized in that said fork (15) is provided with a safety locking element (20) that engages with the aforesaid threaded element (19).

6. A lighting apparatus (10) according to Claim 1, characterized in that said spotlight (11) is free to rotate with respect to the aforesaid fork (15) about a substantially horizontal axis thanks to hinges (21) set at the sides of the spotlight (11).

7. A lighting apparatus (10) according to Claim 1, characterized in that it is provided with a device (22) for fast height-adjustment thereof.







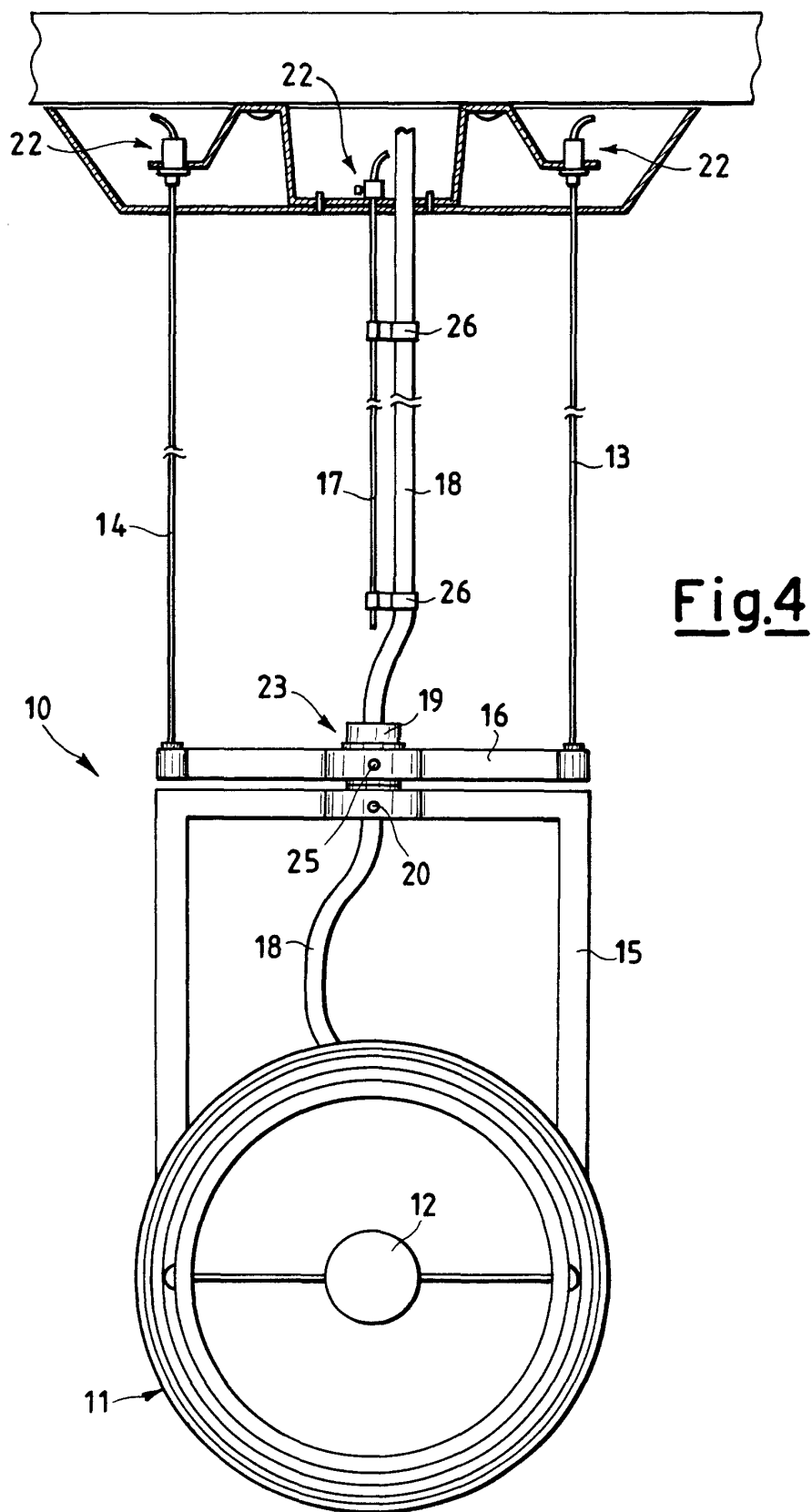


Fig.5

