

TRAILING SOCKET WITH CABLE MANAGEMENT FUNCTION

TECHNICAL FIELD

[0001] The present disclosure relates to the field of sockets, and particularly to a trailing
5 socket with cable management function.

BACKGROUND

[0002] In the daily life, we need to use a variety of electrical devices, and a trailing socket
is generally used when a number of electrical devices are required to be used in the same area.
However, during the using of the trailing socket, it is possible that the cable of the trailing
10 socket is too long, such that the cable spreads around, which affects the aesthetics. In addition,
one trailing socket is often inserted by several electrical devices, and this may cause the
cables of those electrical devices to be messy or even twisted together, which not only
occupies more space, but also accumulates dust easily. Further, it may cause hazards on the
use of electricity, and thus may bring much inconvenience for the users.

SUMMARY

[0003] The present disclosure provides a trailing socket with cable management function
capable of receiving a cable and thereby saving the space in using.

[0004] A trailing socket with cable management function includes a socket body 1 and a
first cable collecting cover 2 fitted with the socket body 1, and a cavity 3 is formed between
20 the socket body 1 and the first cable collecting cover 2.

[0005] Alternatively, the trailing socket with cable management function may further
include a second cable collecting cover 4 fitted with the socket body 1. The first cable
collecting cover 2 and the second cable collecting cover 4 are respectively located at opposite
ends of the socket body 1.

[0006] Alternatively, the socket body 1 and the first cable collecting cover 2 fit with each
25 other elastically, and the socket body 1 and the second cable collecting cover 4 fit with each

other elastically.

[0007] Alternatively, the first cable collecting cover 2 is a lower cover of the socket body 1, and the second cable collecting cover 4 is an upper cover of the socket body 1.

5 [0008] Alternatively, a cable of the socket body 1 is introduced from a lengthwise side of the socket body 1, and a cable introducing opening 21 is provided on the first cable collecting cover 2.

[0009] Alternatively, the first cable collecting cover 2 and/or the second cable collecting cover 4 is provided with a heat dissipating hole; or the first cable collecting cover 2 and/or the second cable collecting cover 4 is an un-closed configuration.

10 [0010] Alternatively, the first cable collecting cover 2 is provided with a track for placing the socket body 1 or a cable winder.

[0011] Alternatively, the trailing socket with cable management function may further include a controller 5 for remotely controlling the socket body 1.

15 [0012] Alternatively, the socket body 1 is further provided with a switch, a USB socket, a surge protector or a fault protection lamp; preferably, the switch is a rocker switch.

[0013] Alternatively, the switch is provided outside the first cable collecting cover 2 or the second cable collecting cover 4; or the switch is provided on a side of the socket body 1.

[0014] As illustrated in the above technical solutions, this embodiment of the present disclosure has the following advantageous:

20 [0015] The present disclosure includes a socket body 1 and a first cable collecting cover 2 fitted with the socket body 1, and a cavity 3 is formed between the socket body 1 and the first cable collecting cover 2. The first cable collecting cover 2 and the cavity 3 are capable of receiving the socket body 1 and the cable, thus the using space is saved. Further, the socket body 1 fits with the first cable collecting cover 2, such that the transverse volume of the
25 socket body 1 would not be increased, which facilitates the use of users.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] In order to illustrate the technical solutions of the embodiments in the present disclosure more clearly, the drawings referred to describe the embodiments will be briefly

described hereinafter. Apparently, the drawings in the following description are only several embodiments of the present disclosure, and for the person skilled in the art other drawings may be obtained based on these drawings without any creative efforts.

5 [0017] Figure 1 is a schematic view of a trailing socket with cable management function according to an embodiment of the present disclosure;

[0018] Figure 2 is another schematic view of a trailing socket with cable management function according to the embodiment of the present disclosure;

[0019] Figure 3 is a schematic view of a socket body according to an embodiment of the present disclosure;

10 [0020] Figure 4 is an oblique side view of a trailing socket with cable management function according to an embodiment of the present disclosure;

[0021] Figure 5 is a top view of the trailing socket with cable management function according to the embodiment of the present disclosure; and

15 [0022] Figure 6 is a left view of the trailing socket with cable management function according to the embodiment of the present disclosure.

DETAILED DESCRIPTION

20 [0023] The technical solutions in the embodiments of the present disclosure will be described clearly and completely hereinafter in conjunction with the drawings in the embodiments of the present disclosure. Apparently, the described embodiments are only a part of the embodiments of the present disclosure, rather than all embodiments. Based on the embodiments in the present disclosure, all the other embodiments, made by a person skilled in the art without any creative efforts, will fall into the protection scope of the present disclosure.

[0024] The present disclosure provides a trailing socket with cable management function capable of receiving a cable and saving the space in using.

25 [0025] The technical solutions of the present disclosure are described in detail through specific embodiments hereinafter; reference is made to Fig. 1 to Fig. 6.

[0026] A trailing socket with cable management function includes a socket body 1 and a first cable collecting cover 2 fitted with the socket body 1. A cavity 3 is formed between the

socket body 1 and the first cable collecting cover 2.

[0027] Specifically, reference is made to Fig. 1. The socket body 1 fits with the first cable collecting cover 2, and the cavity 3 is formed therebetween. The cavity 3 may be configured to receive a cable of the socket body 1 and a cable of an electrical device using the socket body 1, which may save the using space and facilitate the using of a user. Optionally, the cavity 3 may also be configured to receive others, which is not specified here.

[0028] Optionally, the first cable collecting cover 2 may be an upper cover or a lower cover.

[0029] It is to be appreciated that, referring to Fig. 2, this embodiment may further include a second cable collecting cover 4 fitted with the socket body 1. Specifically, the first cable collecting cover 2 and the second cable collecting cover 4 are respectively located at opposite ends of the socket body 1 to enclose the socket body 1 from the front side and the back side.

[0030] Reference is made to Fig. 2. For example, the first cable collecting cover 2 may be a lower cover of the socket body 1, and the second cable collecting cover 4 may be an upper cover of the socket body 1. In this way, the socket body 1 is protected by the first cable collecting cover 2 and the second cable collecting cover 4 to achieve the function of waterproofing and dustproofing. The cavity 3 formed between the socket body 1 and the first cable collecting cover 2 allows the excessive cables to be collected and placed under the lower surface of the socket body 1. The socket surface of the socket body 1 is ensured to be not covered by the cables when the cables are received in the cavity. The cable of the socket body 1 may be ensured not to be contaminated by dirt or spilling water and the cable of the socket body 1 and the cable of the electrical device may be kept to be clean and dustproof, and further, the safety hazards may be eliminated.

[0031] Preferably, the socket body 1 and the first cable collecting cover 2 may fit with each other elastically, and the socket body 1 and the second cable collecting cover 4 may fit with each other elastically. It should be appreciated that, the socket body 1 and the first cable collecting cover 2 as well as the socket body 1 and the second cable collecting cover 4 may also fit with each other through other manners, for example, snap connecting, tight fitting or threaded connecting and the like, which is not specified here.

[0032] Specifically, the trailing socket with cable management function in this embodiment (abbreviated as a cable management trailing socket hereinafter for the simplicity for

describing) may be hanged on a wall, for example, may be hanged on the wall horizontally or vertically. In order to facilitate the trailing socket to be hanged horizontally, the cable of the socket body 1 may be introduced from a lengthwise side of the socket body 1, for example, from a middle position of the lengthwise side of the socket body 1, referring to Fig. 3 specifically. Then, if the cable of the socket body 1 or the cable of the electrical device is too long, the cable may be introduced from the cable management trailing socket more conveniently.

[0033] Optionally, the first cable collecting cover 2 may be provided with a cable introducing opening 21 for introducing the cable of the socket body 1 from the first cable collecting cover 2 at a position where the cable of the socket body 1 is introduced. Specifically, the cable introducing opening 21 may be arranged in the lengthwise side of the first cable collecting cover 2 and may also be arranged in the widthwise side. Referring to Fig. 1 or Fig. 2, the cable introducing opening 21 in Fig. 1 or Fig. 2 is arranged in the widthwise side of the first cable collecting cover 2.

[0034] It should be appreciated that, the cable introducing opening 21 may also be arranged on the second cable collecting cover 4.

[0035] In some embodiments, in order to facilitate the heat dissipating of the socket body 1 received between the first cable collecting cover 2 and the second cable collecting cover 4, a heat dissipating hole may be arranged on the first cable collecting cover 2 or the second cable collecting cover 4. Heat dissipating holes may be arranged on both the first cable collecting cover 2 and the second cable collecting cover 4.

[0036] Preferably, referring to Fig. 1 or Fig. 2, the first cable collecting cover 2 and /or the second cable collecting cover 4 may be an un-closed configuration. For example, the first cable collecting cover 2 or the second cable collecting cover 4, or the sides of the first cable collecting cover 2 and the second cable collecting cover 4 may be arranged as an un-closed configuration. Specifically, a single side of the first cable collecting cover 2 and/or the second cable collecting cover 4 may be arranged as an un-closed configuration, as well as the double sides of the first cable collecting cover 2 and/or the second cable collecting cover 4 may be arranged as un-closed configurations. In this embodiment, a single side of the first cable collecting cover 2 and a single side of the second cable collecting cover 4 are arranged as un-closed configurations. Referring to Fig. 1 or Fig. 2 specifically, the cable may be

introduced not only from the cable introducing opening 21 but also from the un-closed side of the first cable collecting cover 2 and/or the second cable collecting cover 4, which facilitates the using of the users and the heat dissipation of the socket body 1. The trailing socket has an aesthetic appearance and meets the individualized demand of users.

5 **[0037]** In some embodiments, in order to receive the cable in the first cable collecting cover 2 more properly, the first cable collecting cover 2 may be provided with a cable winder which allows the cable to be received orderly.

10 **[0038]** In some embodiments, the first cable collecting cover 2 is further provided with a track for placing the socket body 1, such that during the use of the socket body 1, the user may pull out the socket body 1 from the track or push it into the track directly, which facilitates the user's operation.

15 **[0039]** In some embodiments, the switching on or off state of the socket body 1 may be controlled remotely via the controller 5. When the socket body 1 is located in a position which is difficult to control, such as under a table, the user may remotely control the socket body 1 directly via the controller 5; this facilitates the using of users. Reference may be specifically made to Fig. 3, which is a schematic view of a socket body with a controller. It is to be noted that, the controller 5 is detachable, and may be detached from the socket body 1 when it is not required to be used by the user.

20 **[0040]** In some embodiments, the socket body 1 is further provided with any one or several of a switch, a USB socket, a surge protector or a fault protection lamp.

25 **[0041]** Optionally, the switch on the socket body 1 may be a rocker switch, and when the switch is in an off state, two ends of the rocker switch are on the same level. That is to say, the rocker switch is in a completely flat state and has an effect of excellent appearance.

30 **[0042]** Preferably, referring to Fig. 4, Fig. 5 or Fig. 6, the switch and the socket surface of the socket body 1 may be arranged on two steps, and the second cable collecting cover 4 may be sized slightly smaller than the first cable collecting cover 2. That is, the second cable collecting cover 4 may be sized slightly smaller than the socket body 1, such that the switch is located outside the covering area of the first cable collecting cover 2. After the socket body 1 is received between the first cable collecting cover 2 and the second cable collecting cover 4, the user may contact the switch without opening the first cable collecting cover 2 or the

second cable collecting cover 4, which facilitates the user to control the trailing socket.

5 [0043] In some embodiments, a switch may be arranged on a side of the socket body 1, and for example, the switch may be arranged on the side of the un-closed configuration of the first cable collecting cover 2 and the second cable collecting cover 4. Thus, the user may contact the switch without opening the first cable collecting cover 2 or the second cable collecting cover 4, which facilitates the user to control the trailing socket.

10 [0044] It is to be noted that, the respective parts constituting the cable receiving trailing socket in this embodiment has passed 3C authentication, which, compared with the socket body with only a connector thereof passing the 3C authentication in the prior art, may protect the consumers in a safer manner and assure more accurately the quality of products.

15 [0045] As illustrated in the foregoing, the present disclosure includes the socket body 1 and the first cable collecting cover 2 fitted with the socket body 1; the cavity 3 is formed between the socket body 1 and the first cable collecting cover 2. The first cable collecting cover 2 and the cavity 3 are capable of receiving the socket body 1 and the cable, thus the using space is saved. The socket body 1 fits with the first cable collecting cover 2, such that the transverse volume of the socket body 1 would not be increased, which facilitates the using of users.

20 [0046] A trailing socket with cable management function provided by the present disclosure is described hereinbefore in detail. For those ordinary skilled in the art, modifications may be made in terms of the embodiments and the application scopes according to the concept of the present disclosure. In summary, the contents of the present specification should not be understood as limit to the present disclosure.

CLAIMS

1. A trailing socket with cable management function, comprising:

5 a socket body (1) and a first cable collecting cover (2) fitted with the socket body (1),
wherein a cavity (3) is formed between the socket body (1) and the first cable collecting cover (2).

2. The trailing socket with cable management function according to claim 1, further comprising: a second cable collecting cover (4) fitted with the socket body (1);

10 wherein the first cable collecting cover (2) and the second cable collecting cover (4) are respectively located at opposite ends of the socket body (1).

3. The trailing socket with cable management function according to claim 2, wherein

15 the socket body (1) and the first cable collecting cover (2) fit with each other elastically,
and the socket body (1) and the second cable collecting cover (4) fit with each other elastically.

4. The trailing socket with cable management function according to any one of claims 1 to 3, wherein

20 the first cable collecting cover (2) is a lower cover of the socket body (1), and the second cable collecting cover (4) is an upper cover of the socket body (1).

5. The trailing socket with cable management function according to any one of claims 1 to 3, wherein

25 a cable of the socket body (1) is introduced from a lengthwise side of the socket body (1),
and a cable introducing opening (21) is provided on the first cable collecting cover (2).

6. The trailing socket with cable management function according to any one of claims 1 to 3, wherein

the first cable collecting cover (2) and/or the second cable collecting cover (4) is provided with a heat dissipating hole; or

the first cable collecting cover (2) and/or the second cable collecting cover (4) is an un-closed configuration.

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7. The trailing socket with cable management function according to any one of claims 1 to 3, wherein

the first cable collecting cover (2) is provided with a track for placing the socket body (1) or a cable winder.

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8. The trailing socket with cable management function according to any one of claims 1 to 3, further comprising a controller (5) for remotely controlling the socket body (1).

9. The trailing socket with cable management function according to any one of claims 1 to 3, wherein

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the socket body (1) is further provided with a switch, a USB socket, a surge protector or a fault protection lamp; and

the switch is a rocker switch.

10. The trailing socket with cable management function according to claim 9, wherein

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the switch is provided outside the first cable collecting cover (2) or the second cable collecting cover (4); or

the switch is provided on a side of the socket body (1).