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(71) Applicants:

Self Electronics Co., Ltd.
 Ningbo City, Zhejiang 315103 (CN)

 SELF ELECTRONICS Germany GmbH 51149 Köln (DE)

Lin, Wanjiong
 Ningbo City, Zhejiang 315103 (CN)

(72) Inventor: Yang, Jun Ningbo, 315103 (CN)

(74) Representative: 2K Patentanwälte Blasberg

Kewitz & Reichel Partnerschaft mbB Schumannstrasse 27 60325 Frankfurt am Main (DE)

(54) A TRACK ADAPTER AND THE DRIVING POWER SUPPLY AND TRACK LIGHT THEREOF

(57)The present invention discloses a track adapter comprising: a base for a fixed connection to a lamp; a pick-up post, rotatably provided above said base about a first central axis, the post body being provided with a negative conductive sheet and at least two positive conductive sheets, all positive conductive sheets comprising a positive pick-up section and a positive contact extending from said positive pickup section to the top of said pick-up post, all positive contacts being spaced about said first central axis; an adjustment conductive part, rotatably provided around said first central axis at the top of said pick-up post, comprising a conductive contact movably connected to the top of said pick-up post, said conductive contacts having a moving path passing through all positive contacts; and an adjustment knob, fixedly connected to said adjustment conductive part and with a central axis of rotation coinciding with said first central axis. The present invention also discloses a drive power supply and a lamp with this adapter; the present invention is neat and beautiful while solving the problem of difficulty in adjusting the phase of the adapter.

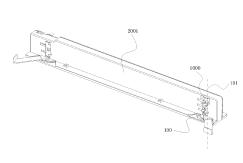


Figure 1

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Technical areas

[0001] The present invention relates to the technical field of track lighting, in particular to a track adapter, a drive power supply with the adapter and a lamp.

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Technical background

[0002] A track lamp is a kind of lamp installed on a track, a track lamp is installed with a track adapter in a matching track, the track contains conductive metal sheets on both sides on the inside, and the track adapter has a rotatable conductive metal sheet. When installed, the track lamp above the conductive metal sheet contacts the conductive metal sheets inside the track, the track lamp is electrified, and the track lamp is lit.

[0003] In order to achieve different power supply modes, with multi-wire and multi-loop track lamps, there is the need to set up a plurality of conductive metal sheets, and also the need to set up a phase regulator to adjust the conduction between each conductive metal sheet and the track lamp to enable the enable the track lamp and different conductive metal sheets in the track to be turned on, and the output end of the phase regulator is connected with the driving power supply to supply power to the track lamp.

[0004] The phase adjustment of the conventional track adapter is placed at the bottom of the adapter, which is partially exposed after mounting to the track, making the appearance unattractive and increasing the cost.

Contents of the invention

[0005] In view of this, the present invention provides a track adapter to solve the above technical problem.[0006] A track adapter comprising:

a base, adapted for a fixed connection to a lamp, provided with a first central axis;

a pick-up post (200), rotatably provided above said base about said first central axis, the post body provided with a negative conductive sheet and at least two positive conductive sheets, all positive conductive sheets comprising a positive pick-up section and a positive contact extending from said positive pick-up section to the top of said pick-up post, all positive contacts being spaced about said first central axis, said negative conductive sheet comprising a negative pick-up section;

an adjustment conductive part, rotatably provided around said first central axis at the top of said pick-up post, comprising a conductive contact movably connected to the top of said pick-up post, said conductive contact having a moving path passing through all positive contacts; and

an adjustment knob, fixedly connected to said ad-

justment conductive part and with a central axis of rotation coinciding with said first central axis.

[0007] Preferably, said track adapter further comprises a positive conductive connection fixedly connected to said base and kept in constant conduction with said conductive contact by means of a first rotating conductive structure.

[0008] Preferably, the top periphery of said pick-up post is provided with slots arranged at intervals around said first central axis, said positive contacts being set in the corresponding slots.

[0009] Preferably, said adjustment knob is provided with a slotted hole at the bottom of said adjustment knob, the top of said pickup post extends into said slotted hole, and said conductive contact is pressed between the outer wall of said pickup post and the inner wall of said slotted hole.

[0010] Preferably, said positive pick-up section and said positive contact are connected by means of a positive U-connector, said positive U-connector having an opening towards the top of said pick-up post, said pick-up post being provided with a front stopper and a back stopper clamping both sides of said positive U-connector.

[0011] Preferably, said first rotating conductive structure comprises:

a first annular conductive sheet, connected to said positive conductive connector;

said adjusting conductive section further comprising. a second annular conductive sheet, fixedly connected to said adjustment knob and pressed and coaxially provided with said first annular conductive sheet by means of an elastic member, said conductive contact being connected to said second annular conductive sheet;

a first pivot, set in the middle of the top surface of said pick-up post and inserted in said first annular conductive sheet and said second annular conductive sheet.

[0012] Preferably, said elastic member is provided between said second annular conductive sheet and the conductive contact.

[0013] Preferably, said adjustment knob is provided with an arcuate slot on the top surface, the arcuate slot is provided with a notch on the inner side, the outer edge of said second annular conductive sheet extends downwardly to form an arcuate conductive sheet that snaps into said arcuate slot, the extended section being said elastic member, part of said arcuate conductive sheet projecting inwardly to snap into said notch forming said conductive contact.

[0014] Preferably, said negative pick-up section and all positive pick-up sections are divided into two groups arranged on each side of said pick-up post.

[0015] Preferably, said track adapter further comprises a negative conductive connection fixedly connected to

said base and kept in constant conduction with said negative conductive sheet by means of a second rotating conductive structure.

[0016] Preferably, said negative conductive sheet further comprises a negative U-connector sheet connected to said negative pick-up section, said negative U-connector sheet being fixed to said pick-up post and in constant contact with said second rotating conductive structure.

[0017] Preferably, said negative conductive connector is provided at one end near said negative conductive sheet with a first conductive surface perpendicular to and intersecting said first central axis; said second rotating conductive structure comprising:

a second conductive surface, provided against said first conductive surface.

a conductive connector electrically connecting said second conductive surface and the negative conductive sheet.

[0018] Preferably, said pick-up post comprises a body provided with individual parts and a housing provided outside said body, said housing being provided with avoidance holes protruding from said positive pick-up section and negative pick-up section.

[0019] A drive power supply comprises a power supply housing and a circuit board provided in said power supply housing, further comprising a track adapter as described above, said base being fixedly connected to said power supply housing.

[0020] Preferably, said pick-up post and said adjustment conductive part are provided in said power supply housing; said power supply housing is provided with a mounting hole at the top for said adjustment knob to be exposed, and at least one side is provided with a pickup hole for said adjustment knob to be exposed, and at least one side is provided with a pick-up hole for said negative conductive sheet and/or positive conductive sheet to protrude.

[0021] Preferably, said negative take-off section is divided into two groups with all positive take-off sections, arranged on each side of said take-off post, and both sides of said power supply housing are provided with take-off holes.

[0022] Preferably, said circuit board is provided on one side of said pick-up post, the plane in which the board body of said circuit board is located being set parallel to said first central axis.

[0023] Preferably, said pick-up post has a turning handle extending from said power supply housing.

[0024] A lamp comprises a lamp holder, said lamp holder provided with a light source assembly, a drive power supply and a track adapter as described above, said base being secured to said lamp holder.

[0025] Preferably, said lamp holder comprises a U-shaped profile with an upward opening and end caps provided at both ends of said U-shaped profile, said light

source assembly being provided on the outside of said U-shaped profile and said base being provided on the bottom of the inside of said U-shaped profile; said end caps being provided with a notch to avoid the track.

[0026] Preferably, said pick-up post has a rotating handle extending out of said power supply housing, and a side wall of said U-shaped profile is provided with a strip hole through said rotating handle.

[0027] Technical effects of the present invention:

The track adapter of the invention, the driving power supply with the adapter and the lamp, the lamp frame of the lamp can wrap the whole track around the design, clean and beautiful, and at the same time solve the problem that it is difficult to adjust the phase when the adapter of the prior art is applied in this kind of lamps and lanterns, the phase adjustment knob is reduced and put on the top of the adapter, which is easy to adjust, solves the above adjustment problems and adapts to more occasions. It makes the structural design of lamps and lanterns more

Drawings

flexible.

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[0028] Embodiments of the present invention are described below in connection with the accompanying drawings, wherein:

Fig. 1 shows a schematic diagram of the structure of the drive power supply according to an embodiment;

Fig. 2 shows an exploded schematic diagram of the parts of the drive power supply according to the embodiment;

Fig. 3 shows an enlarged schematic of part A of fig. 2; Fig. 4 shows a schematic of the construction of the pick-up post with the housing removed;

Fig. 5 shows an exploded schematic diagram of the drive power supply according to the embodiment;

Fig. 6 shows an enlarged schematic of part B of fig. 5; Fig. 7 shows a schematic diagram of the structure of fig. 6 from another angle;

Fig. 8 shows a schematic diagram of the structure of the lamp mounted to the track according to the embodiment;

Fig. 9 shows a schematic diagram of the structure of the lamp according to the embodiment; and Fig. 10 shows an exploded schematic diagram of the structure of the lamp according to the embodiment.

Specific implementation

[0029] Specific embodiments of the present invention are described in further detail below based on the accompanying drawings. It should be understood that the description of embodiments of the present invention herein is not intended to limit the scope of protection of the present invention.

[0030] As shown in Fig. 1 to 7, the track adapter 1000

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of the present invention can be used alone or integrated with the drive power supply, as long as the lower part of the housing of the drive power supply is defined as the base 100. The other components of the track adapter for fixing and mounting can be used, and the rest of the structure remains unchanged. When the track adapter 1000 is used alone, it is directly connected to the positive and negative terminals of the lamp or the separate drive power supply. This embodiment is illustrated as an example of integration.

[0031] The drive power supply 2000 of this embodiment, comprising a power supply housing 2001, a circuit board 2002 and a track adapter 1000 provided in said power supply housing 2001.

[0032] With the power housing 2001 and circuit 2002 board removed, the track adapter 1000 may stand alone, and the track adapter 1000 of this embodiment comprises a base 100, a pick-up post 200, an adjusting conductive part 300 and an adjusting knob 400. The base 100 is used for fixed connection to the lamp 2000, and is provided with a first central axis 101; the base 100 is used for carrying other components, the structure and shape of which may vary, and may also be a structure of a housing to accommodate other components to be mounted therein. The first central axis 101 is set parallel to the direction of insertion of the track adapter 1000 into the track, the pick-up post 200 being set above said base 100 and is rotatable around the first central axis 101; the pick-up post is provided with a negative conductive sheet 201 and at least two positive conductive sheets 202, all positive conductive sheets 202 include positive pick-up sections 2022 and positive contacts 2021 extending from said positive pick-up sections 2022 to the top of said pickup post 200. All positive contacts 2021 are arranged at intervals around said first central axis 101, said negative conductive sheets 201 include negative pick-up segments 2011; the pick-up post 200 is inserted into the track and rotated to achieve electrical connection with the power supply track, the pick-up post 200 of this embodiment has a negative conductive sheet 201 and at least two positive conductive sheets 202. In the invention, the negative and positive poles are defined as follows: For alternating current, the symbols L, N are used wherein L is the phase line that is positive, and N is the neutral line that is negative. For direct current, + indicates the positive pole and - indicates the negative pole. In standard prior art multi-wire tracks, such as four-wire tracks, which are a standard part, the structure is generally a U-shaped profile, and a plurality of slots extending in the extension direction are arranged on both sides, which are used for setting a conductive metal sheet LI, a conductive metal sheet L2, a conductive metal sheet L3 and a conductive metal sheet N. Of course, all conductive metal sheets can be set on a single side, with different numbers on both sides, and so on. The negative electrode section 2011 and the positive section 2022 of the pick-up post 200 can be set correspondingly. After the pick-up post 200 is extended into the track, the negative electrode

section 2011 and the positive section 2022 can be abutting and conducting with the corresponding conductive metal sheet, and the electrical connection can be realized. The track is a standard part, and the connection mode between the pick-up post 200 and the track is not described as they are prior art.

[0033] The top of the pick-up post 200 refers to the portion that is first inserted into the track along the first central axis 101. All positive conductive sheets 202 comprise a positive pick-up section 2022 and positive contacts 2021 extending from said positive pickup section 2022 to the top of said pick-up post 200, all positive contacts 2021 are spaced around said first central axis 101; an adjustment conductive part 300 is rotatably provided about the first central axis 101 at the top of the pick-up post 200 and comprises a conductive contact 301 movably connected with the top of the pick-up post 200, and the moving path of the conductive contact 301 passes through all positive contacts 2021; the adjusting knob 400 is fixedly connected with the adjustment conductive part 300 and the rotating central axis coincides with the first central axis 101. When the adjusting knob 400 rotates, it drives the adjustment conductive part 300 to rotate so that the conductive contact 301 is electrically connected with a different positive contact 2021.

[0034] In order to facilitate output, the track adapter 1000 also includes a positive conductive connector 500 which is fixedly connected to the base 100 and stays normally conductive with the conductive contact 301 through the first rotational conductive structure 501. The positive conductive connector 500 may electrically connect the positive conductive sheet 202 selected by the adjusting knob 400.

[0035] In order to facilitate the fixing of the edge, the outer periphery of the top of the pick-up post 200 is provided with a slots 203 arranged at intervals around the first central axis 101, and the positive contact 2021 is arranged in the corresponding slot 203. The outer surface of the positive contact 2021 is arranged parallel to the first central axis 101, so that the diameter of the pick-up post 200 can be smaller and more compact. The outer surface of the positive contact 2021 can also be arranged perpendicularly or obliquely with the first central axis 101, so that the technique can also be realized, but in order to increase the diameter of the pick-up post 200.

[0036] A slotted hole 401 is arranged at the bottom of the adjusting knob 400, and the top of the power extraction post 200 extends into the slotted hole 401, and the conductive contact 301 is pressed between the outer wall of the power extraction post 200 and the inner wall of the slotted hole 401.

[0037] In order to improve the elasticity of the positive pick-up section 2022 and improve the reliability of contact with the track, in this embodiment, the positive pick-up section 2022 and the positive electrode contact 2021 are connected by the positive U-connector 2023. The opening of the positive U-connector 2023 faces the top of the pick-off post 200, which is provided with a front stoppper

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204 and a rear stopper 205 clamping both sides of the positive U-connector 2023.

[0038] The first rotating conductive structure 501 is a structure which can realize rotational electrical connection, and there are many concrete ways to realize it. In this embodiment, in order to facilitate manufacture and installation, the first rotating conductive structure 501 includes a first annular conductive sheet 5011 connected with the positive conductive connector 500. The adjustment conductive part 300 also comprises a second annular conductive sheet 302 and a first pivot 303. The first pivot 303 is made of copper material and can ensure electrical conductivity. The second annular conductive sheet 302 is fixedly connected with the adjusting knob 400 and is pressed and coaxially arranged with the first annular conductive sheet 5011 through the elastic member 304. The conductive contact 301 is connected with the second annular conductive sheet 302. The first pivot 303 is arranged in the middle of the top surface of the pickup post 200 and inserted into the first annular conductive sheet 302 and the second annular conductive sheet 302. The setting of the elastic member 304 keeps the adjusting conductive part 300 in constant contact with the first annular conductive sheet 5011, thereby maintaining constant conduction.

[0039] The shape and structure of the elastic member 304 can be selected according to the needs, which can be integrated with the second annular conductive sheet 302, or can be split, and an O-ring can be used when a split arrangement is used. In this embodiment, the elastic member 304 is arranged between the second annular conductive sheet 302 and the conductive contact 301. It may also be arranged between the second annular conductive sheet 302 and the first annular conductive sheet 5011, or between the first annular conductive sheet 5011 and the fixing frame, which is fixedly connected with the base 100.

[0040] The top surface of the adjusting knob 400 is provided with an arcuate slot 402, and the inside of the arcuate slot 402 is provided with a notch 4021. In this embodiment, the outer edge of the second annular conductive sheet 302 extends downward to form an arcuate conductive sheet 3021 stuck into the arc groove 402, and the extension section is the elastic member 304. A part of the arc conductive sheet 3021 protrudes inward into the notch 4021 to form the conductive contact 301. That is, the second annular conductive sheet 302, the elastic member 304 and the arc conductive sheet 3021 are integrally molded and manufactured to form the adjustment conductive part 300.

[0041] In the present embodiment, there are three positive conductive sheets 202 but may also be provided with two, four or more. The negative pick-up section 2011 and all positive pick-up sections 2022 are divided into two groups and are respectively arranged on both sides of the pick-up post 200. To facilitate external connection, the track adapter 1000 further comprises a negative conductive connection 600 fixedly connected to the base 100

and kept in constant conduction with the negative conductive sheet 201 by means of a second rotating conductive structure 601.

[0042] The negative conductive sheet 201 further comprises a negative U-connector sheet 2012 connected to the negative pick-up section 2011, the negative U-connector sheet 2012 is fixed to the pick-up post 200 and in constant contact with the second rotating conductive structure 601.

[0043] There are many forms of second rotating conductive structures 601. In this embodiment, the negative conductive connector 600 is provided with a first conductive surface 602 perpendicular to and intersecting with the first central axis 101. The second rotating conductive structure 601 includes a second conductive surface 6011 and a conductive connector 6012, and the second conductive surface 6011 is arranged against the first conductive surface 602. The conductive connector 6012 is electrically connected to the second conductive surface 6011 and the negative conductive sheet 201.

[0044] In order to facilitate manufacture and installation, in the present embodiment, the pick-up post 200 includes a main body 206 which is provided with individual parts and a housing 207 arranged outside the main body 206. The housing 207 is provided with an avoidance hole 2071 protruding from the positive pick-up section 2022 and the negative pick-up section 2011. The housing 207 includes a left housing 2071 and a right housing 2072 that are fastened to each other, making it more convenient to manufacture and install.

[0045] The drive power supply 2000 of the present embodiment includes a power supply housing 2001, a circuit board 2002 and a track adapter 1000 arranged in the power supply housing, and the base 100 is fixedly connected to the power supply housing 2001. The power supply housing 2001 is divided into two parts, making it easier to install.

[0046] The pick-up post 200 and the adjustment conductive part 300 are arranged in the power supply housing 2001; the top of the power supply housing 2001 is provided with a mounting hole 2003 for exposing the adjusting knob 400. At least one side is provided with a pick-up hole 2004 for the negative conductive sheet 201 and the positive conductive sheet 202 to protrude.

5 [0047] The negative pick-up section 2011 and all positive pick-up sections 2022 are divided into two groups and are respectively arranged on both sides of the pick-up post 200. Both sides of the power supply housing 2001 are provided with a pick-up hole 2004.

[0048] In order to reduce the overall size of the drive power supply 2000, in the present embodiment, the circuit board 2002 is arranged on one side of the pick-up post 200, and the plane of the board body of the circuit board 2002 is arranged parallel to the first central axis 101.

[0049] In order to facilitate the rotation of the pick-up post 200, the pick-up post 200 is provided with a turning handle 208 protruding from the power supply housing

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2001.

[0050] As shown in FIG. 8 to 10, the lamp of the present embodiment includes a lamp holder 3000, which is provided with a light source assembly 4000 and a drive power supply 2000. The light source assembly 4000 includes a lamp plate 4001 and an optical element 4002.

[0051] The lamp holder 3000 of this embodiment can wrap the entire track in a neat and beautiful design. The lamp holder 3000 includes a U-shaped profile 3001 with an opening upward and end caps 3002 arranged at both ends of the U-shaped profile 3001. The light source assembly 4000 is arranged on the outside of the U-shaped profile 3001, and the base 100 is arranged at the bottom of the inside of the U-shaped profile 3001; the end caps 3002 are provided with a notch 3003 to avoid the track. [0052] The pick-up post 200 is provided with a rotating handle 208 protruding from the power supply housing 2001, and the side wall of the U-shaped profile 3001 is provided with a strip hole 3006 passing through the rotating handle 204.

[0053] In another embodiment, the lamp includes a lamp holder 3000, which is provided with a light source assembly 4000, a driving power supply 2000 and a track adapter 1000, and the base 100 is fixed on the lamp holder 3000. Drive power supply 2000 and track adapter 1000 are split.

[0054] The above are only preferred embodiments of the invention and are not used to limit the scope of protection of the invention, and any modification, equivalent replacement or improvement in the spirit of the invention are covered by the claims of the invention.

Claims

1. A track adapter (1000) comprising:

a base (100), adapted for a fixed connection to a lamp (2000), provided with a first central axis (101);

characterized by comprising:

a pick-up post (200), rotatably provided above said base (100) about said first central axis (101), the post body provided with a negative conductive sheet (201) and at least two positive conductive sheets (202), all positive conductive sheets (202) comprising a positive pick-up section (2022) and a positive contact (2021) extending from said positive pick-up section (2022) to the top of said pick-up post (200), all positive contacts (2021) being spaced about said first central axis (101), said negative conductive sheet (201) comprising a negative pick-up section (2011);

an adjustment conductive part (300), rotatably provided around said first central axis

(101) at the top of said pick-up post (200), comprising a conductive contact (301) movably connected to the top of said pick-up post (200), said conductive contact (301) having a moving path passing through all positive contacts (2021); and an adjustment knob (400), fixedly connected to said adjustment conductive part (300) and with a central axis of rotation coinciding with said first central axis (101).

- 2. The track adapter (1000) according to claim 1, characterized in that said track adapter (1000) further comprises a positive conductive connection (500) fixedly connected to said base (100) and kept in constant conduction with said conductive contact (301) by means of a first rotating conductive structure (501).
- 20 3. The track adapter (1000) according to claim 2, characterized in that the top periphery of said pick-up post (200) is provided with slots (203) arranged at intervals around said first central axis (101), said positive contacts (2021) being set in the corresponding slots (203).
 - 4. The track adapter (1000) according to claim 3, characterized in that said adjustment knob (400) is provided with a slotted hole (401) at the bottom of said adjustment knob (400), that the top of said pick-up post (200) extends into said slotted hole (401), and that said conductive contact (301) is pressed between the outer wall of said pickup post (200) and the inner wall of said slotted hole (401).
 - 5. The track adapter (1000) according to claim 3, characterized in that said positive pick-up section (2022) and said positive contact (2021) are connected by means of a positive U-connector (2023), said positive U-connector (2023) having an opening towards the top of said pick-up post (200), said pick-up post (200) being provided with a front stopper (204) and a back stopper (205) clamping both sides of said positive U-connector (2023).
 - **6.** The track adapter (1000) according to claim 2, **characterized in that** said first rotating conductive structure (501) comprises:

a first annular conductive sheet (5011), connected to said positive conductive connector (500); said adjustment conductive part (300) further comprising:

a second annular conductive sheet (302), fixedly connected to said adjustment knob (400) and pressed and coaxially provided with said first annular conductive sheet (5011) by means of an elastic member (304), said conductive contact

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(301) being connected to said second annular conductive sheet (302);

- a first pivot (303), set in the middle of the top surface of said pick-up post (200) and inserted in said first annular conductive sheet (5011) and said second annular conductive sheet (302).
- The track adapter (1000) according to claim 6, characterized in that said elastic member (304) is provided between said second annular conductive sheet (302) and said conductive contact (301).
- 8. The track adapter (1000) according to claim 6, characterized in that said adjustment knob (400) is provided with an arcuate slot (402) on the top surface, the arcuate slot (402) is provided with a notch (4021) on the inner side, the outer edge of said second annular conductive sheet (302) extends downwardly to form an arcuate conductive sheet (3021) that snaps into said arcuate slot (402), the extended section being said elastic member (304), part of said arcuate conductive sheet (3021) projecting inwardly to snap into said notch (4021) forming said conductive contact (301).
- 9. The track adapter (1000) according to any of claims 1 to 8, **characterized in that** said negative pick-up section (2011) and all positive pick-up sections (2022) are divided into two groups arranged on each side of said pick-up post (200).
- 10. The track adapter (1000) according to any of claims 1 to 8, characterized in that said track adapter (1000) further comprises a negative conductive connection (600) fixedly connected to said base (100) and kept in constant conduction with said negative conductive sheet (201) by means of a second rotating conductive structure (601).
- 11. The track adapter (1000) according to claim 10, characterized in that said negative conductive sheet (201) further comprises a negative U-connector sheet (2012) connected to said negative pick-up section (2011), said negative U-connector sheet (2012) being fixed to said pick-up post (200) and in constant contact with said second rotating conductive structure (601).
- 12. The track adapter (1000) according to claim 10, characterized in that said negative conductive connector (600) is provided at one end near said negative conductive sheet (201) with a first conductive surface (602) perpendicular to and intersecting said first central axis (101); said second rotating conductive structure (601) comprising:
 - a second conductive surface (6011), provided against said first conductive surface (602);

- a conductive connector (6012) electrically connecting said second conductive surface (6011) and the negative conductive sheet (201).
- 13. The track adapter (1000) according to any of claims 1 to 8, **characterized in that** said pick-up post (200) comprises a body (206) provided with individual parts and a housing (207) provided outside said body (206), said housing (207) being provided with avoidance holes (2071) protruding from said positive pick-up section (2022) and negative pick-up section (2011).
- 14. A drive power supply (2000) comprising a power supply housing (2001) and a circuit board (2002) provided in said power supply housing, characterized in that it further comprises a track adapter (1000) according to any of claims 1 to 13, said base (100) being fixedly connected to said power supply housing (2001).
- 15. The drive power supply (2000) according to claim 14, characterized in that said pick-up post (200) and said adjustment conductive part (300) are provided in said power supply housing (2001); said power supply housing (2001) is provided with a mounting hole (2003) at the top for said adjustment knob (400) to be exposed, and at least one side is provided with a pick-up hole (2004) for said negative conductive sheet (201) and/or said positive conductive sheet (202) to protrude.
- 16. The drive power supply (2000) according to claim 14, characterized in that said negative pick-up section (2011) all positive take-off sections (2022) are arranged in two groups with on both sides of said pick-up post (200), and that both sides of said power supply housing (2001) are provided with pick-up holes (2004).
- 17. The drive power supply (2000) according to any of claims 14 to 16, **characterized in that** said circuit board (2002) is provided on one side of said pick-up post (200), the plane in which the board body of said circuit board (2002) is located being set parallel to said first central axis (101).
- **18.** The drive power supply (2000) according to any of claims 14 to 16, **characterized in that** said pick-up post (200) has a turning handle (208) extending from said power supply housing (2001).
- **19.** A lamp comprising a lamp holder (3000), said lamp holder (3000) provided with a light source assembly (4000), a drive power supply (2000) and a track adapter (1000) according to any of claims 1 to 13, said base (100) being fixed to said lamp holder (3000).

20. A lamp comprising a lamp holder (3000), **characterized in that** said lamp holder (3000) is provided with a light source assembly (4000) and a drive power supply (2000) according to any of claims 14 to 18.

21. The lamp according to claim 20, characterized in that said lamp holder (3000) comprises a U-shaped profile (3001) with an upward opening and end caps (3002) provided at both ends of said U-shaped profile (3001), said light source assembly (4000) being provided on the outside of said U-shaped profile (3001) and said base (100) being provided on the bottom of the inside of said U-shaped profile (3001); said end caps (3002) being provided with a notch (3003) to avoid the track.

22. The lamp according to claim 20, characterized in that said pick-up post (200) has a rotating handle (208) extending out of said power supply housing (2001), and a side wall of said U-shaped profile (3001) is provided with a strip hole (3006) through said rotating handle (204).



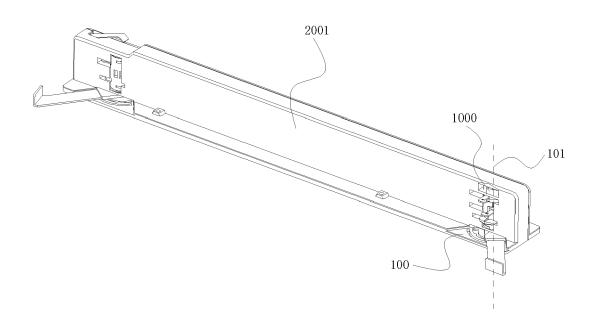


Figure 1

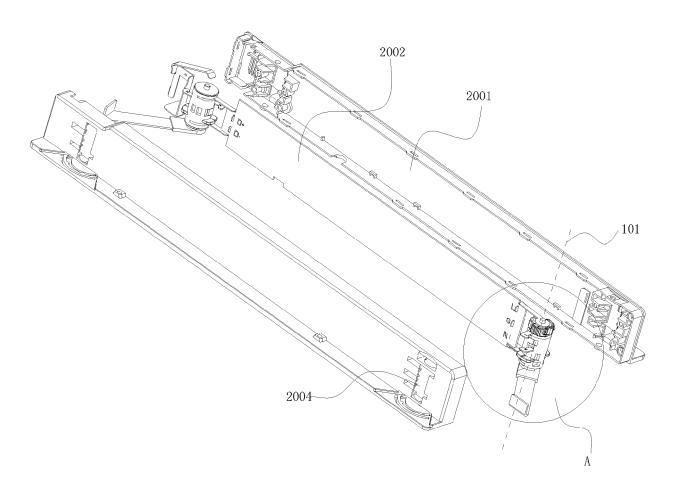


Figure 2

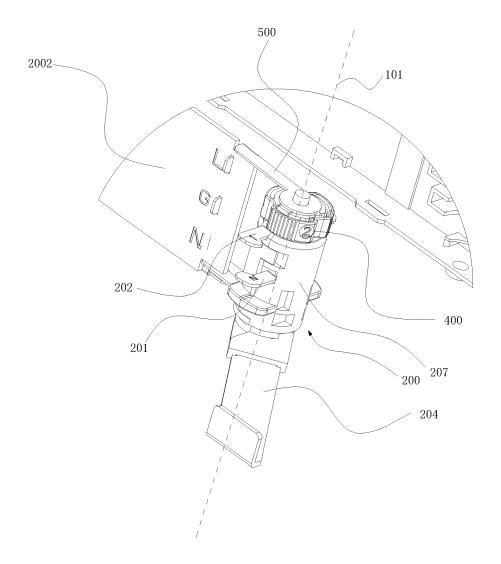


Figure 3

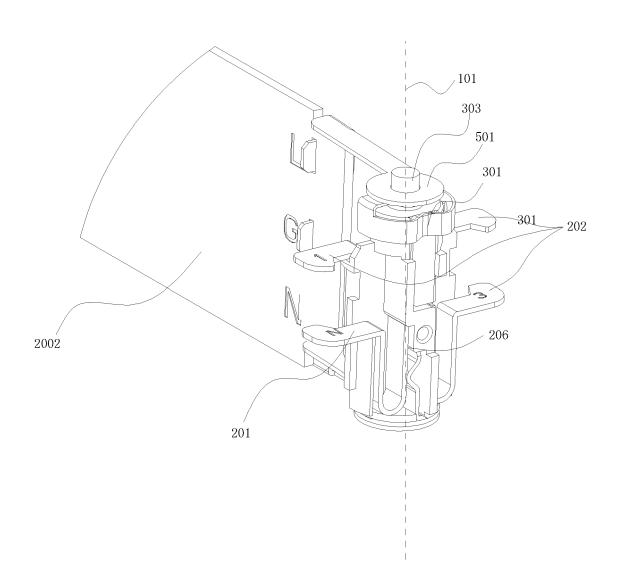


Figure 4

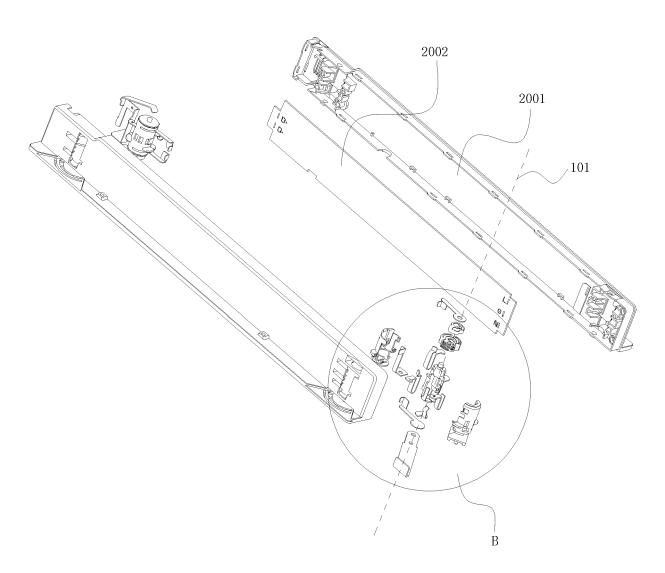


Figure 5

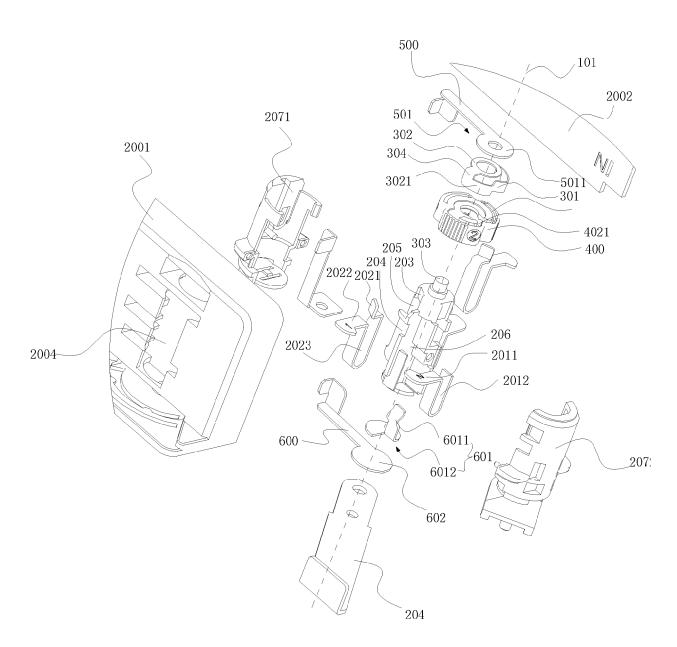


Figure 6

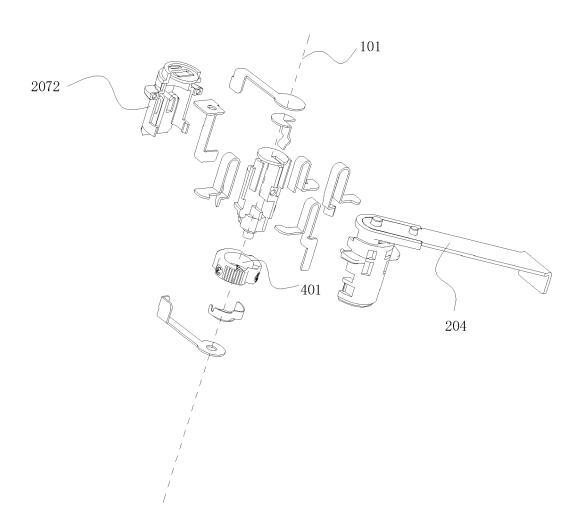


Figure 7

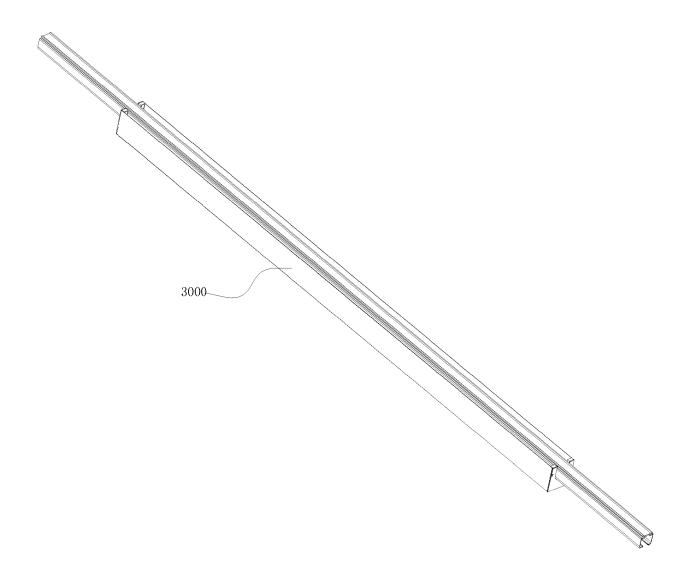


Figure 8

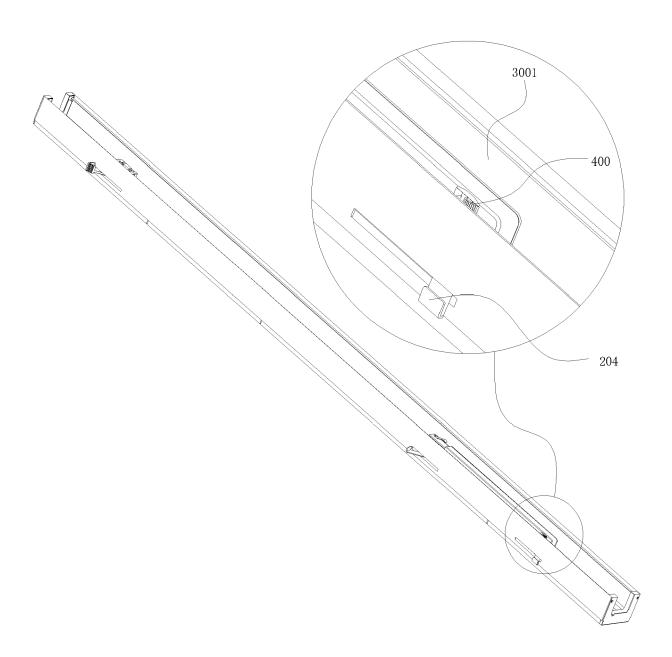


Figure 9

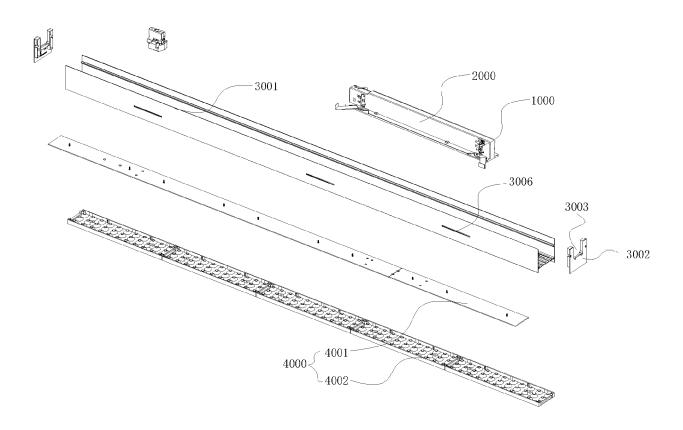


Figure 10



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