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(54) A SUPERCONDUCTING LIGHT-EMITTING LAMINATE LAMP

(57) The embodiments of the invention provide a superconducting light-emitting laminate lamp, the reflective component is arranged on the installation component, and the light-emitting component is arranged in the reflective component, the first sealing components are connected to the sides of the reflective component, and the second sealing component is connected to the other side of the reflective component, one end of wires is connected to the light-emitting component, and the other end is electrically connected to the driving transformer. When the embodiments of the invention are used, by setting the reflective component on the installation component and the light-emitting component inside the reflective

component, it can play the role of lighting, by connecting the first sealing components to the sides of the reflective component, and the second sealing component to the other side of the reflective component, it is convenient to assemble the lamp and improve the assembly efficiency, by connecting one end of the wires to the light-emitting component, and the other end is electrically connected to the driving transformer, it can provide power to ensure the normal operation of the circuit, when assembling, the laminates and side panels on the cabinet can be covered, so that the five light-seeing surfaces of the square panels can emit light evenly.

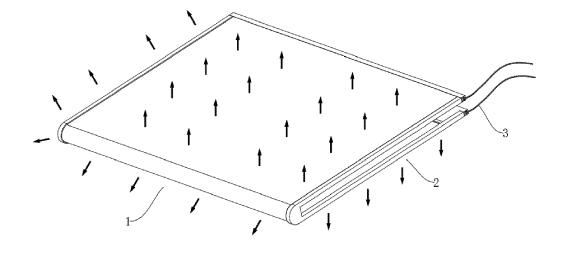


FIG. 1

TECHNICAL FIELD

[0001] The embodiments of the invention belong to the technical field of lamps, in particular to a superconducting light-emitting laminate lamp.

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BACKGROUND

[0002] According to its use function, cabinets are divided into wardrobes, cabinets, lockers, etc., which are widely used. However, there is usually no lighting source inside the cabinets that people use now, and the user relies on the light that sends from the window and the electric lamp in the room to identify and take articles in the cabinet when there is no lighting.

[0003] However, due to the angle of illumination, the inside of the cabinet appears darker, and it is very inconvenient for people to load and take articles from the inside of the cabinet at this time, so the improvement is urgently needed.

SUMMARY OF THE INVENTION

[0004] The object of embodiments of the invention is to provide a superconducting light-emitting laminate lamp, when the embodiments of the invention are used, by setting the reflective component on the installation component and the light-emitting component inside the reflective component, it can play the role of lighting, by connecting the first sealing components to the sides of the reflective component, and the second sealing component to the other side of the reflective component, it is convenient to assemble the lamp and improve the assembly efficiency, by connecting one end of the wires to the light-emitting component, and the other end is electrically connected to the driving transformer, it can provide power to ensure the normal operation of the circuit, thereby solving the problems in the background.

[0005] In order to achieve the above technical problems, the technical scheme of the new light-emitting laminate lamp provided in the embodiments of the invention is as follows:

[0006] The embodiments of the invention disclose a superconducting light-emitting laminate lamp, comprising the reflective component, the first sealing components, the wires, light-emitting component, the second sealing component and installation component, the reflective component is arranged on the installation component, and the light-emitting component is arranged in the reflective component, the first sealing components are connected to the sides of the reflective component, and the second sealing component is connected to the other side of the reflective component, one end of wires is connected to the light-emitting component, and the other end is electrically connected to the driving transformer. **[0007]** Preferred embodiment in any of the above

schemes, the reflective component comprises a light guide part, and the light guide part is U-shaped.

[0008] Preferred embodiment in any of the above schemes, the reflective component comprises an image layer, and the image layer is arranged on the inner surface of the light guide part.

[0009] Preferred embodiment in any of the above schemes, the reflective component comprises a reflective part, and the reflective part is located on the outer surface of the image layer, so that the image layer is located between the reflective part and the light guide part.

[0010] Preferred embodiment in any of the above schemes, the first sealing component comprises the first edge sealing fastener and the first connecting plate, and the first edge sealing fastener is integrally formed with the first connecting plate.

[0011] Preferred embodiment in any of the above schemes, the light-emitting component comprises circuit boards and luminous bodies, the luminous bodies are arranged on the circuit boards, and the circuit boards are installed on the second sealing component, the circuit boards are electrically connected to one end of the wires; there are multiple luminous bodies, and the multiple luminous bodies are connected in parallel.

[0012] Preferred embodiment in any of the above schemes, the second sealing component comprises the second edge sealing fastener and the second connecting plate, the second edge sealing fastener is integrally formed with the second connecting plate, the second edge sealing fastener and the second connecting plate are clamped with one side of the light guide part.

[0013] Preferred embodiment in any of the above schemes, the image layer is a light-transmitting plate with the pattern texture.

[0014] Preferred embodiment in any of the above schemes, the reflective part is a superconducting light acrylic plate.

[0015] Preferred embodiment in any of the above schemes, the installation component comprises a cabinet and laminates, the cabinet is provided with laminates, and a plurality of laminates are provided, and the cabinet is divided into a multi-layer structure, and when assembled, the light guide part is clamped with the laminate.

[0016] Compared with the prior art, a superconducting light-emitting laminate lamp provided by embodiments of the invention, when in use, by setting the reflective component on the installation component and the light-emitting component inside the reflective component, it can play the role of lighting, by connecting the first sealing components to the sides of the reflective component, and the second sealing component to the other side of the reflective component, it is convenient to assemble the lamp and improve the assembly efficiency, by connecting one end of the wires to the light-emitting component, and the other end is electrically connected to the driving transformer, it can provide power to ensure the normal operation of the circuit.

[0017] By using the superconducting light acrylic plate, and the side of the superconducting light acrylic plate close to the human body is U-shaped, so the U-shaped arc position can play the role of light guide, thus achieving the overall uniform lighting effect.

[0018] The light-emitting laminate lamp is applied to the wardrobe and other cabinets, and the U-shaped superconducting light acrylic plate is processed by the heat bending treatment technology, the laminate is completely wrapped by the superconducting light acrylic plate, so that the entire laminate can emit light, and it can be applied in furniture or custom furniture cabinets and can be integrated to bring a perfect decorative effect, when installing, after the cabinet is assembled, the U-shaped bent laminate lamp can be directly covered and stuck on the cabinet laminate to form a full enclosure, when it is installed on a cabinet with a mirror, the lamp can be integrated with the mirror and the cabinet to form a 360degree surround light, so that people can enjoy the light without dead angle when operating makeup in front of the makeup mirror, and the superconducting light acrylic plate can make the luminous body not dazzling, no glare, and the light is soft and comfortable.

[0019] In order to better integrate the light-emitting superconducting plate with the mirror and cabinet, the second edge sealing fastener and the second connecting plate are used to fix the mirror and the light-emitting superconducting plate, presenting the effect that the left and right side panels of the entire cabinet are emitting light.

BRIEF DESCRIPTION OF THE DRAWINGS

[0020] The accompanying drawings described here are used to provide a further understanding of the invention and constitute the sub-component of the invention, the schematic embodiments and descriptions of the invention are used to explain the invention and do not constitute an improper limitation to the invention. Hereinafter, some specific embodiments of the invention will be described in detail with reference to the accompanying drawings in an exemplary rather than restrictive manner. The same reference numerals in the accompanying drawings indicate the same or similar components or sub-components, and those skilled in the art should understand that these accompanying drawings are not necessarily drawn to scale, in the accompanying drawings:

FIG. 1 is a schematic diagram of a superconducting light-emitting laminate lamp in the embodiment of the invention.

FIG. 2 is a schematic exploded view of a superconducting light-emitting laminate lamp in the embodiment of the invention.

FIG. 3 is an enlarged schematic diagram of A in FIG. 2 of a superconducting light-emitting laminate lamp in the embodiment of the invention.

FIG. 4 is a schematic diagram of the application as-

sembly of a superconducting light-emitting laminate lamp in the embodiment of the invention.

[0021] As shown in the figures:

[0022] 1 refers to reflective component; 11 refers to image layer; 12 refers to reflective part; 13 refers to light guide part; 2 refers to first sealing component; 21 refers to first edge sealing fastener; 22 refers to first connecting plate; 3 refers to wire; 4 refers to light-emitting component; 41 refers to circuit board; 42 refers to luminous body; 5 refers to second sealing component; 51 refers to second edge sealing fastener; 52 refers to second connecting plate; 6 refers to cabinet; 61 refers to laminate.

DESCRIPTION OF EMBODIMENTS

[0023] In order to enable those skilled in the art to better understand the schemes of the invention, the technical schemes in the embodiments of the invention will be clearly and completely described below in combination with the accompanying drawings in the embodiments of the invention. Obviously, the described embodiment is only the embodiment of sub-component of the invention, rather than the embodiment of the entire component. Based on the embodiments in the invention, all other embodiments obtained by persons of ordinary skill in the art without creative efforts shall fall within the scope of protection of the invention.

[0024] It should be noted that when an element is referred to as being "fixed on" or "arranged on" another element, it may be directly on this element or be indirectly on this element. When an element is referred to as being "connected to" another element, it can be directly connected to this element or indirectly connected to this element.

[0025] In the description of the invention, it should be understood that the orientation or positional relationship indicated by the terms "length", "width", "upper", "lower", "front", "rear", "left", "right", "vertical", "horizontal", "top", "bottom", "inner", "outer", etc. is based on the orientation or position relationship shown in the accompanying drawings, which is only for the convenience of describing the invention and simplifying the description, rather than indicating or implying that the referred device or element must have a particular orientation, be constructed and operated in a particular orientation, and thus should not be construed as limiting the invention.

[0026] In addition, the terms of "first" and "second" are only used for descriptive purposes, and should not be construed as indicating or implying relative importance or implying the number of indicated technical features. Therefore, the features defined with "first" and "second" may expressly or implicitly include one or more of the features, and in the description of the invention, the meaning of "multiple" is two or two above, unless otherwise expressly specifically defined.

[0027] The following embodiments of the invention take the new light-emitting laminate lamp with front

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wheels and rear wheels as an example to describe the schemes of the invention in detail, but this embodiment does not limit the protection scope of the invention.

EMBODIMENTS

[0028] As shown in FIG. 1 to FIG. 4, the embodiments of the invention provide a superconducting light-emitting laminate lamp, comprising the reflective component 1, the first sealing components 2, the wires 3, light-emitting component 4, the second sealing component 5 and installation component, the reflective component 1 is arranged on the installation component, and the light-emitting component 4 is arranged in the reflective component 1, the first sealing components 2 are connected to the sides of the reflective component 1, and the second sealing component 5 is connected to the other side of the reflective component 1, one end of wires 3 is connected to the light-emitting component 4, and the other end is electrically connected to the driving transformer.

[0029] In the superconducting light-emitting laminate lamp of the invention, when in use, by setting the reflective component 1 on the installation component and the light-emitting component 4 inside the reflective component 1, it can play the role of lighting, by connecting the first sealing components 2 to the sides of the reflective component 1, and the second sealing component 5 to the other side of the reflective component 1, it is convenient to assemble the lamp and improve the assembly efficiency, by connecting one end of the wires 3 to the light-emitting component 4, and the other end is electrically connected to the driving transformer, it can provide power to ensure the normal operation of the circuit.

[0030] As shown in FIG. 1 to FIG. 4, the reflective component 1 comprises a light guide part 13, and the light guide part 13 is U-shaped, the reflective component 1 comprises an image layer 11, and the image layer 11 is arranged on the inner surface of the light guide part 13, the reflective component 1 comprises a reflective part 12, and the reflective part 12 is located on the outer surface of the image layer 11, so that the image layer 11 is located between the reflective part 12 and the light guide part 13.

[0031] In the superconducting light-emitting laminate lamp of the invention, when assembled, the image layer 11 is bonded to the inner surface of the light guide part 13, and the reflective part 12 is bonded to the outer surface of the image layer 11, so that the image layer 11 can be arranged between the reflective part 12 and the light guide part 13, so as to facilitate disassembly and assembly, in order to realize more convenient assembly, the light guide part 13 is set in a U-shape, and the shapes of the image layer 11 and the reflective part 12 are consistent with the shape of the light guide part 13, therefore, when installing, the image layer 11 and the reflective part 12 are respectively inserted into the U-shaped groove inside the light guide part 13 to realize the installation, wherein, in order to achieve a tighter installation, the outer

surface of the image layer 11 is attached to the inner surface of the light guide part 13, and the outer surface of the reflective part 12 is attached to the inner surface of the image layer 11, which can achieve a closer connection, in the embodiments of the invention, preferably, the image layer 11 is a light-transmitting plate with the pattern texture, the reflective part 12 is a superconducting light acrylic plate, in the new light-emitting laminate lamp described in the embodiments of the invention, different patterns can be set on the image layer 11 according to the needs of users, so that when the reflective part 12 reflects light, the patterns on the image layer 11 can be emitted, thereby emitting different shapes, which is convenient for users to use.

[0032] As shown in FIG. 1 to FIG. 4, the first sealing component 2 comprises the first edge sealing fastener 21 and the first connecting plate 22, and the first edge sealing fastener 21 is integrally formed with the first connecting plate 22.

[0033] In the superconducting light-emitting laminate lamp of the invention, when assembled, there are two first sealing components 2, and the two first sealing components 2 are respectively located on both sides of the reflective component 1, so that the two first sealing components 2 can seal the two sides of the reflective component 1, when assembled, the first edge sealing fastener 21 can be inserted into the U-shaped groove, and one side of the first edge sealing fastener 21 is connected to the inner surface of the reflective part 12, so as to facilitate disassembly and assembly, in the embodiments of the invention, preferably, the first edge sealing fastener 21 and the first connecting plate 22 are made of plastic, so they have good elasticity and are more convenient for installation, in the embodiments of the invention, the contact surface of the first edge sealing fastener 21 with the reflective part 12 has anti-skid lines, wherein the antiskid lines are flexible, therefore, when it contacts with the reflective part 12, it not only has the effect of anti-skid, but also makes the connection more firm, and can also play a role in protecting the reflective part 12.

[0034] As shown in FIG. 1 to FIG. 4, the light-emitting component 4 comprises circuit boards 41 and luminous bodies 42, the luminous bodies 42 are arranged on the circuit boards 41, and the circuit boards 41 are installed on the second sealing component 5, the circuit boards 41 are electrically connected to one end of the wires 3; there are multiple luminous bodies 42, and the multiple luminous bodies 42 are connected in parallel.

[0035] In the superconducting light-emitting laminate lamp of the invention, when installing, a plurality of luminous bodies 42 are installed on the circuit boards 41, and the plurality of luminous bodies 42 are connected in parallel, therefore, when one of the luminous bodies 42 is damaged, other luminous bodies can work normally, in the embodiments of the invention, the luminous bodies 42 can be formed by luminous bodies with multiple colors connected in parallel, in this case, the colors of the luminous bodies can be adjusted according to the needs of

users, so that it is convenient for users to use.

[0036] As shown in FIG. 1 to FIG. 4, the second sealing component 5 comprises the second edge sealing fastener 51 and the second connecting plate 52, the second edge sealing fastener 51 is integrally formed with the second connecting plate 52, the second edge sealing fastener 51 and the second connecting plate 52 are clamped with one side of the light guide part 13.

[0037] In the superconducting light-emitting laminate lamp of the invention, when assembled, the second edge sealing fastener 51 is integrally formed with the second connecting plate 52, which can make the structure stronger, when assembled, the circuit board 41 is installed on the second edge sealing fastener 51, and the second edge sealing fastener 51 is inserted into the U-shaped groove, so as to facilitate disassembly and assembly, in the embodiments of the invention, preferably, the second edge sealing fastener 51 and the second connecting plate 52 are made of aluminum alloy.

[0038] As shown in FIG. 1 to FIG. 4, the installation component comprises a cabinet 6 and laminates 61, the cabinet 6 is provided with laminates 61, and a plurality of laminates 61 are provided, and the cabinet 6 is divided into a multi-layer structure, and when assembled, the light guide part 13 is clamped with the laminate 61.

[0039] In the superconducting light-emitting laminate lamp of the invention, in application, in order to achieve more convenient lighting, the cabinet 6 can be divided into multi-layer independent structures through the laminates 61, and each laminate 61 can be plugged in the reflective component 1, so as to realize the function of easy plugging and unplugging.

[0040] When installing, in order to facilitate the installation, the modular installation method is adopted, the mirror surface is independent, and the left and right parts are also independent, first, putting the superconducting light acrylic plate and the luminous bodies on the countertop of the cabinet, starting from one side and bending the superconducting light acrylic plate, then putting the mirror surface and then using the other side to bend the superconducting light acrylic plate to join together, finally, using the second edge sealing fastener and the second connecting plate to fix the bent superconducting light acrylic plates on the left and right sides to the left and the right side panels of the cabinet, and then finally forming a whole.

[0041] In the superconducting light-emitting laminate lamp of the invention, in order to be more convenient for users to use, the drive transformer is electrically connected to the controller, and the controller can regulate the brightness and color of multiple luminous bodies, in order to further make its regulation more precise, a sensor for real-time collection of light intensity can be set on the cabinet 6, and the sensor is electrically connected to the controller for transmitting the information of the collected light intensity to the controller in real time, thereby the controller can intelligently control the brightness of the luminous bodies according to the intensity of the external

light.

[0042] In the superconducting light-emitting laminate lamp of the invention, in order to further facilitate the user's use, a proximity sensor for real-time sensing of the human body can be set on the cabinet 6, and the proximity sensor is electrically connected to the controller, when the human body approaches, the proximity sensor transmits information to the controller, so that the controller can control the luminous bodies to be turned on or off.

[0043] Compared with the prior art, in the superconducting light-emitting laminate lamp of the invention, when in use, by setting the reflective component 1 on the installation component and the light-emitting component 4 inside the reflective component 1, it can play the role of lighting, by connecting the first sealing components 2 to the sides of the reflective component 1, and the second sealing component 5 to the other side of the reflective component 1, it is convenient to assemble the lamp and improve the assembly efficiency, by connecting one end of the wires 3 to the light-emitting component 4, and the other end is electrically connected to the driving transformer, it can provide power to ensure the normal operation of the circuit.

[0044] Finally, it should be noted that the above embodiments are only used to illustrate the technical schemes of the invention, rather than to limit them; although the invention has been described in detail with reference to the foregoing embodiments, those skilled in the art should understand that it is still possible to modify the technical schemes described in the foregoing embodiments, or perform equivalent replacements for the technical features of the sub-component or the entire component, and these modifications or replacements do not make the essence of the corresponding technical schemes depart from the scope of the technical schemes of various embodiments of the invention.

Claims

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- 1. A superconducting light-emitting laminate lamp, comprising the reflective component (1), the first sealing components (2), the wires (3), light-emitting component (4), the second sealing component (5) and installation component, the reflective component (1) is arranged on the installation component, and the light-emitting component (4) is arranged in the reflective component (1), the first sealing components (2) are connected to the sides of the reflective component (1), and the second sealing component (5) is connected to the other side of the reflective component (1), one end of wires (3) is connected to the light-emitting component (4), and the other end is electrically connected to the driving transformer.
- 2. A superconducting light-emitting laminate lamp according to claim 1, wherein the reflective component (1) comprises a light guide part (13), and the light

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guide part (13) is U-shaped.

with the laminate (61).

- 3. A superconducting light-emitting laminate lamp according to claim 2, wherein the reflective component (1) comprises an image layer (11), and the image layer (11) is arranged on the inner surface of the light guide part (13).
- 4. A superconducting light-emitting laminate lamp according to claim 3, wherein the reflective component (1) comprises a reflective part (12), and the reflective part (12) is located on the outer surface of the image layer (11), so that the image layer (11) is located between the reflective part (12) and the light guide part (13).
- 5. A superconducting light-emitting laminate lamp according to claim 4, wherein the first sealing component (2) comprises the first edge sealing fastener (21) and the first connecting plate (22), and the first edge sealing fastener (21) is integrally formed with the first connecting plate (22).
- 6. A superconducting light-emitting laminate lamp according to claim 5, wherein the light-emitting component (4) comprises circuit boards (41) and luminous bodies (42), the luminous bodies (42) are arranged on the circuit boards (41), and the circuit boards (41) are installed on the second sealing component (5), the circuit boards (41) are electrically connected to one end of the wires (3); there are multiple luminous bodies (42) are connected in parallel.
- 7. A superconducting light-emitting laminate lamp according to claim 6, wherein the second sealing component (5) comprises the second edge sealing fastener (51) and the second connecting plate (52), the second edge sealing fastener (51) is integrally formed with the second connecting plate (52), the second edge sealing fastener (51) and the second connecting plate (52) are clamped with one side of the light guide part (13).
- **8.** A superconducting light-emitting laminate lamp according to claim 7, wherein the image layer (11) is a light-transmitting plate with the pattern texture.
- 9. A superconducting light-emitting laminate lamp according to claim 8, wherein the reflective part (12) is a superconducting light acrylic plate. A superconducting light-emitting laminate lamp according to claim 9, wherein the installation component comprises a cabinet (6) and laminates (61), the cabinet (6) is provided with laminates (61), and a plurality of laminates (61) are provided, and the cabinet (6) is divided into a multi-layer structure, and when assembled, the light guide part (13) is clamped

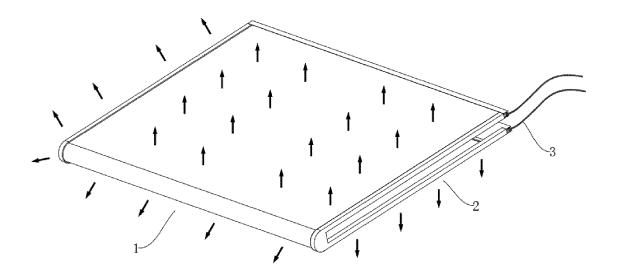


FIG. 1

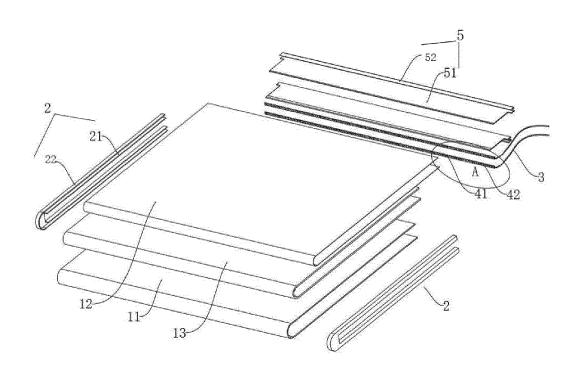


FIG. 2

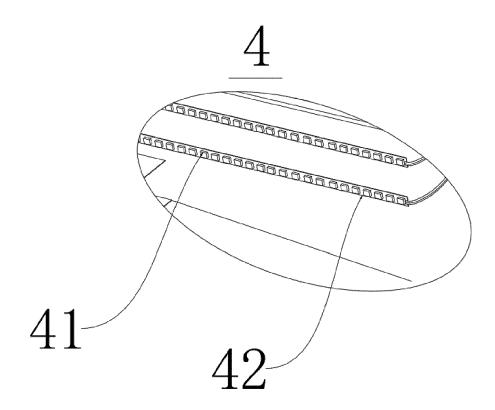
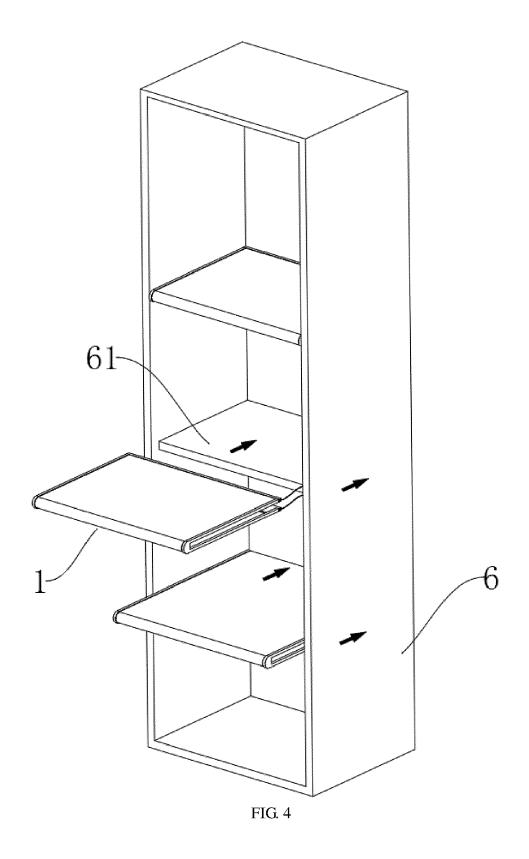


FIG. 3



DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document with indication, where appropriate, of relevant passages



Category

EUROPEAN SEARCH REPORT

Application Number

EP 23 15 2333

CLASSIFICATION OF THE APPLICATION (IPC)

Relevant

to claim

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EPO FORM 1503 03.82 (P04C01)

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- A : technological background
 O : non-written disclosure
 P : intermediate document

& : member of the same patent family, corresponding document

X Y A	CN 109 210 435 A (GUANGDONG HUASHI TECH CO LTD) 15 January 2019 (2019-01-15) * figures 1-3 *	1 2-6 7-9	INV. F21S10/00 F21K9/61
Y A	JP 4 519756 B2 (TOSHIBA MATSUSHITA DISPLAY TEC) 4 August 2010 (2010-08-04) * figure 1 *	1 2-6 7-9	
x	KR 101 649 975 B1 (HEESUNG ELECTRONICS CO LTD [KR]) 23 August 2016 (2016-08-23) * figures 1-3 *	1	
Y	JP 2004 070189 A (HITACHI LTD; HITACHI ELECTRONIC DEVICES CO) 4 March 2004 (2004-03-04)	2-6	
A	* figure 6 *	1,7-9	
Y	WO 2013/114747 A1 (TOSHIBA LIGHTING & TECHNOLOGY [JP]) 8 August 2013 (2013-08-08)	2-6	TECHNICAL FIELDS SEARCHED (IPC)
A	* figures 1-6 *	1,7-9	F21S F21V F21W G02B F21K
	The present search report has been drawn up for all claims Place of search Date of completion of the search		Examiner
	The Hague 13 July 2023	Keb	emou, Augustin
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EP 4 246 034 A1

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EP 23 15 2333

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								13-07-2023
10	C	Patent document ited in search report		Publication date		Patent family member(s)		Publication date
	Cı	N 109210435	A	15-01-2019	NONE	:		
15		2 4519756		04-08-2010	JP	2007128821	A	04-08-2010 24-05-2007
	KI	R 101649975	в1	23-08-2016	NONE			
20		2004070189	A	04-03-2004	JP JP	4126210 2004070189	B2 A	30-07-2008 04-03-2004
	WC	2013114747	A1	08-08-2013	JP	2013161626 2013114747	A A1	19-08-2013 08-08-2013
25								
30								
35								
40								
45								
50								
	RM P0459							

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82