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(54) **MULTIFUNCTIONAL MODULAR FURNITURE WITH LIGHTING**

(57) Multifunctional modular furniture with its own lighting comprised of a base (1), a support (2) and a work table (3), which will have its own lightning system (4).

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Description**FIELD OF THE ART**

[0001] The present invention belongs to the field of furniture for home and commercial use, and more specifically to the field of modular furniture.

BACKGROUND OF THE INVENTION

[0002] Multipurpose furniture of any type and characteristics is available today in the sector described above. All this furniture has a basic structure which is assembled in different ways to achieve the purpose for which it has been designed.

[0003] There is furniture which is not readily disassembled once assembled, leaving the impression that the furniture only performs the function for which it has been designed. This does not allow the versatility of being able to change an element which, by keeping one and the same base structure, offers a wide range of uses.

[0004] Furthermore, the non-modularity of this furniture greatly complicates transport, as the entire assembly must be handled already assembled.

[0005] Moreover, most furniture of this type lacks self illumination that may facilitate performing tasks for which it has been designed, without taking into account the ornamental feature that suitable illumination, solely with decorative purposes, may add.

[0006] Below are references to earlier applications relating to the described tool existing today:

1. (AR109362) MODULAR DISPLAY AND TRAY WHICH CAN BE USED IN SAID DISPLAY
2. (WO2018160052) MULTIFUNCTIONAL ASSEMBLY SYSTEM FOR THE MODULAR CONSTRUCTION OF FURNITURE
3. (ES2665587) CONVERTIBLE FURNITURE FOR THE OUTDOOR SPACES OF HOTELS AND RESTAURANTS.
4. (ES2662269) MODULAR MULTIFUNCTIONAL WOODEN FURNITURE.
5. (MX2017015483) MODULAR FURNITURE UNIT HAVING POWER DISTRIBUTION.
6. (MX2017005676) UPHOLSTERED MODULAR FURNITURE ITEM.
7. (ES1203637) MODULAR WALL-MOUNTED FURNITURE.

DESCRIPTION OF THE INVENTION

[0007] The technical problem to be solved by the

present invention is to obtain completely modular, multi-functional, and folding furniture made up of three modules. The furniture can be used for all kinds of events by joining the 3 modules in the actual place where said furniture is to be used. The furniture will furthermore have a self-illumination system.

[0008] In this context, the furniture herein presented will have three different modules: the base, the support, and the work table.

[0009] The base (1) will be the same for all types of models, uses, and designs, differing only in the measurements that will be adapted to user needs.

[0010] The support (2) will be that differentiating the different models and designs. Like in the case of the base, the measurements will be configured according to customer needs, adapting the desired height and width for customer activity.

[0011] The furniture will additionally have a self-illumination system which may be of LED type and be included in the boards of the support.

[0012] With this description, the furniture herein presented offer clear technical advantages with respect to furniture existing on the market, as it can be readily assembled and disassembled, facilitating the transport of the assembly, where said assembly can be transported in three separate modules.

[0013] The furniture also offers the possibility of full customization, in which both the support and the work table will depend on end user or customer needs. The user or customer chooses the characteristics and dimensions of the product, according to the use to be made of the furniture at hand.

[0014] Furthermore, the work table will be completely interchangeable, so one and the same base with one and the same support may serve different functions depending on when, where it will only be necessary to change the part of the table on which work is performed.

[0015] Moreover, the furniture will have a self-illumination system that may serve functional or ornamental and decorative needs.

[0016] In summary, the present invention relates to completely modular furniture which facilitates transport tasks, as well as allows free customization thereof according to customer needs. These needs may be different depending on when the furniture will be used, where it is only necessary to change one of the components of the furniture itself. Additionally, the furniture has the self-illumination system.

[0017] The description and the claims that will be described below do not seek to exclude other technical features, components, or steps. For those skilled in the art, other objects, advantages, and features of the invention will be inferred in part from the description and in part from the use of the invention. The following examples and drawings are provided by way of illustration and do not seek to limit the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0018] To complement the description that is being made and for the purpose of helping to better understand the features of the invention, a set of drawings in which the following is depicted in an illustrative and non-limiting manner is attached as an integral part of said description:

- Figure 1. View of the furniture as a whole.
- Figure 2. Top view the furniture as a whole.
- Figure 3. Bottom view of the furniture as a whole.
- Figure 4. Rear view of the furniture as a whole.
- Figure 5. Side view of the furniture as a whole.
- Figure 6. View from the front portion of an example of a support.
- Figure 7. View from the front portion of an example of a support with illumination detail.
- Figure 8. Rear view of an example of a support.
- Figure 9. Rear view of an example of a support.
- Figure 10. Bottom view of an example of a support.
- Figure 11. View from the front portion of an example of a work table.
- Figure 12. Side view of an example of a work table.
- Figure 13. Top view of an example of a work table.
- Figure 14. Bottom view of an example of a work table.
- Figure 15. Example of the furniture as a whole with a specific configuration.
- Figure 16. Example of the furniture as a whole with a specific configuration.
- Figure 17. Example of the furniture as a whole with a specific configuration.

PREFERRED EMBODIMENT OF THE INVENTION

[0019] A preferred configuration of the invention is described based on the attached figures.

[0020] More specifically, the object of the present specification is characterized by comprising multifunctional modular furniture made up of three different modules: a base (1), a support (2), and a work table (3). An example can be seen in Figure 1 and Figure 2.

[0021] Additionally and to facilitate the work that is performed and to carry out decorative tasks, the furniture will have a self-illumination system.

[0022] First, the constructive elements of the multifunctional modular furniture, object of the present specification of invention, will be described.

[0023] The furniture will have a base (1), the design and height of which are identical for all types of model and design of the furniture. The length and width will be adapted to the measurements of the support and the work table, according to customer needs. The function thereof will be to provide stability to the entire assembly.

[0024] The base (1) has in its four corners 4 adjustable legs that can be adjusted by means of a mechanical system which, in a preferred embodiment, will be a system of screw. This will facilitate stability on uneven or inclined surfaces.

[0025] Second, the furniture will have a support (2) that differentiates the different models and designs of the furniture. Furthermore, the support will have included therein the illumination (4).

5 **[0026]** The support (2) is made up of a front portion (5) which will comprise 3 sandwich-type plywood boards (6) and contain the illumination (4) therein.

[0027] The support will also have two folding sides (7) that will hold fasteners (8) for fixing the support both to the base (1) and to the work table (3).

10 **[0028]** Lastly, the furniture will have a work table (3), which will be the one that will determine the functionality of the assembly, being able to be chosen from different models.

15 **[0029]** This part will be readily assembled and disassembled using the fasteners (8), such that, with one and the same base and one and the same support, the user may assign different purposes to the furniture according to his or her needs, by only changing the work table (3).

20 **[0030]** Finally, the multifunctional modular furniture will comprise a self-illumination system (4) included in the support (2) of the assembly. It will comprise different illumination areas.

25 **[0031]** In a preferred embodiment, this system will be made up of LED strips connected in series. These strips will be adhered to the sides of the gaps of the central board of each of the boards comprised in the front portion of each support.

30 **[0032]** In a preferred embodiment, the illumination system (4) will have a controller and a digital player with remote control. The system may comprise a USB connection and a slot for an SD card. This player may have a large amount of internal programs.

35 **[0033]** In a preferred embodiment, the illumination system (4) will be connected to a power supply with a current converter which will transform the 220 V of the mains into the voltage necessary for powering the LED illumination.

40 **[0034]** For the transport of the multifunctional modular furniture, custom-made carrier bags may be used, such that in each of said bags there is included one of the components of the furniture, i.e., the base (1), the support (2), and the work table (3).

45 **[0035]** The industrial application of the invention is clear, as it allows obtaining completely modular furniture that is easy to assemble and disassemble, with the transportation advantages that it entails. The furniture will furthermore be fully customizable according to user needs, and may perform different functions depending on the purpose of the event that is being carried out. Additionally, the furniture has a self-illumination system that facilitates performing work on the table, besides increasing the decorative and ornamental qualities of the assembly.

55 Claims

1. **Self-illuminating multifunctional modular furniture** comprising a base (1), a support (2), and a work

table (3), which will have a self-illumination system (4).

2. Self-illuminating multifunctional modular furniture according to claim 1, comprising a base (1) with at least one adjustable leg in each corner. 5

3. Self-illuminating multifunctional modular furniture according to the preceding claims, comprising a support (2) made up of a front portion (5), which is in turn made up of three plywood boards (6) and will contain the illumination system (4) therein, and two folding sides (7) which will have fasteners (8) for fixing the support (2) to the base (1) and to the work table (3). 10 15

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Figure 1

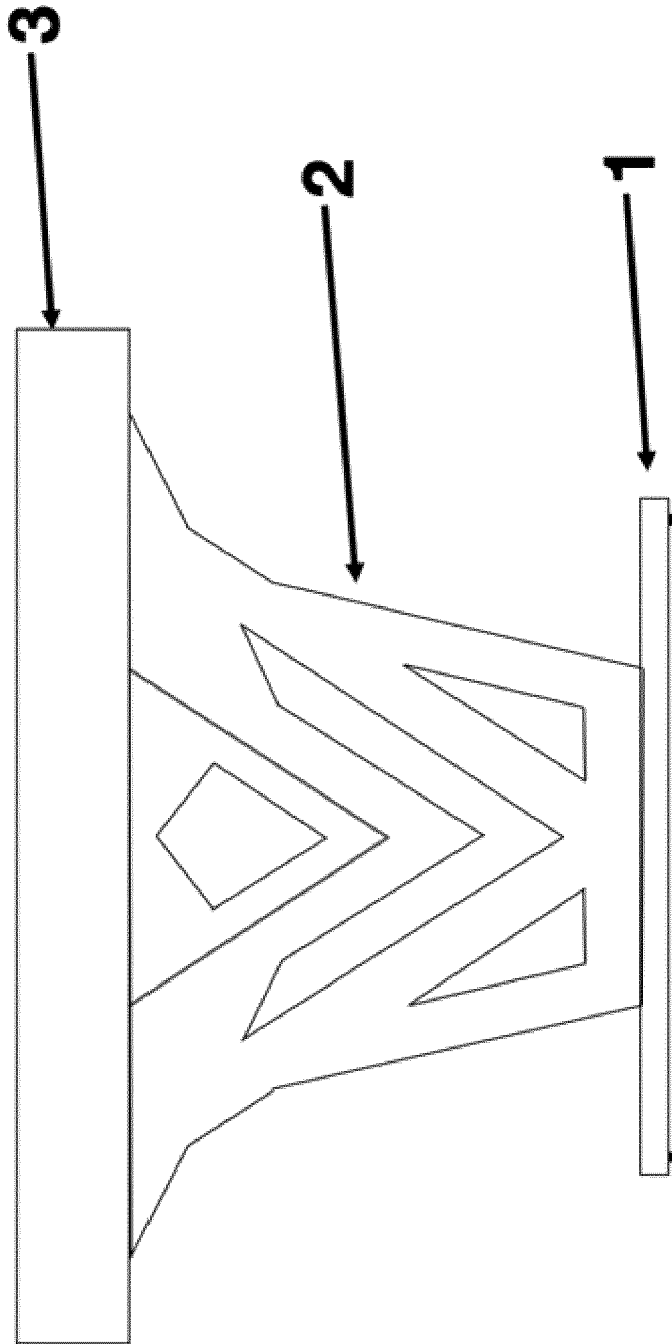


Figure 2

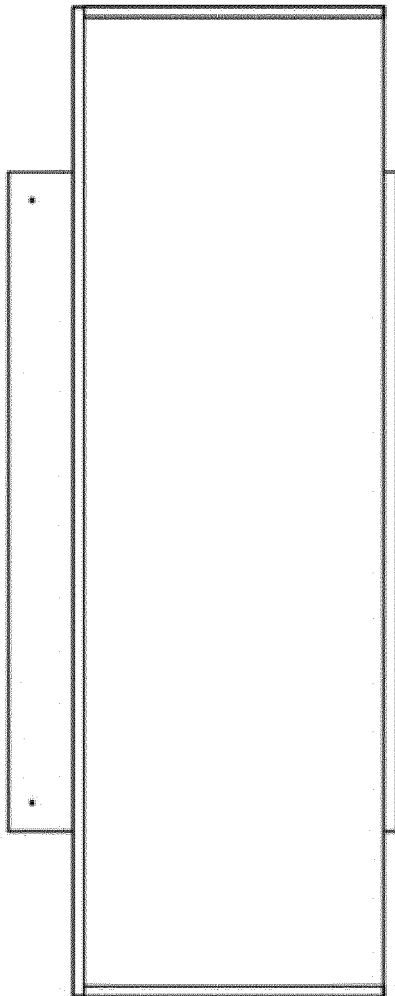


Figure 3

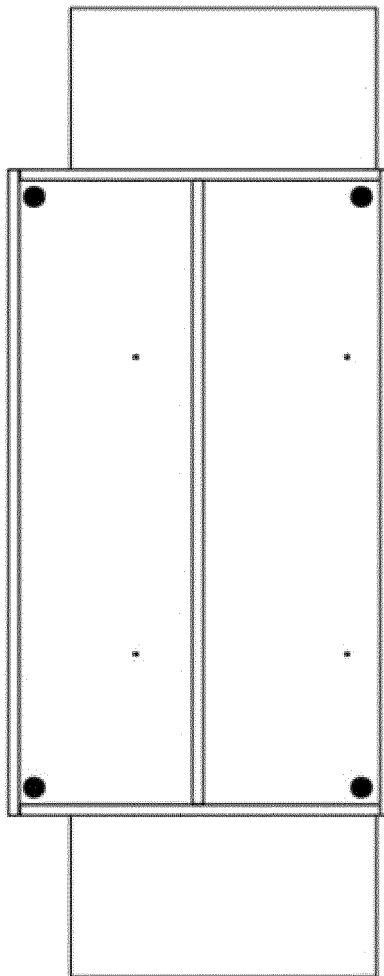


Figure 4

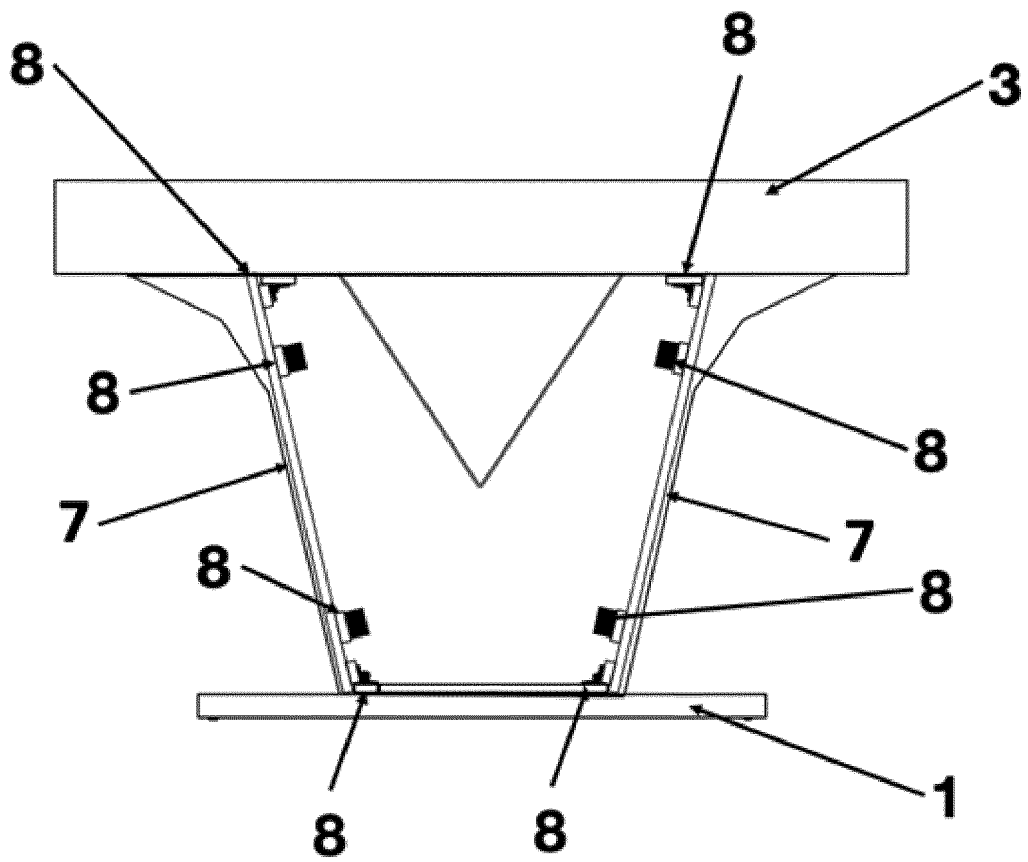


Figure 5

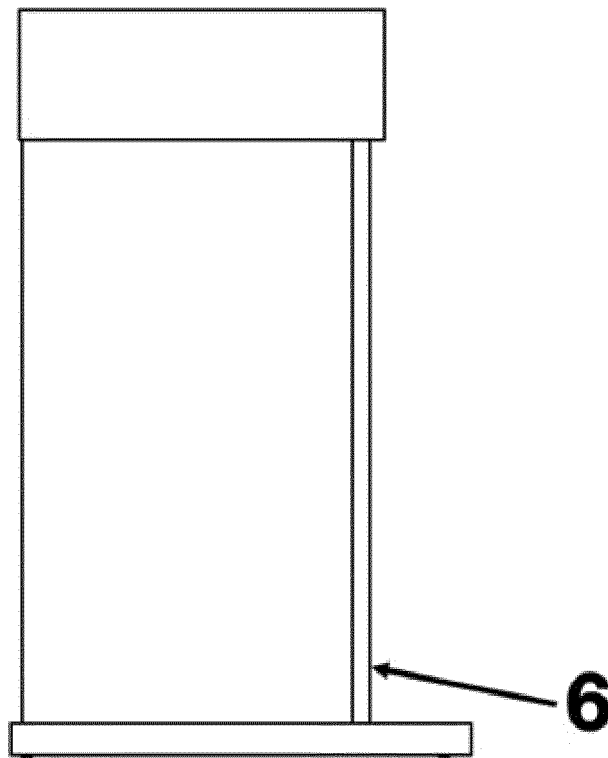


Figure 6

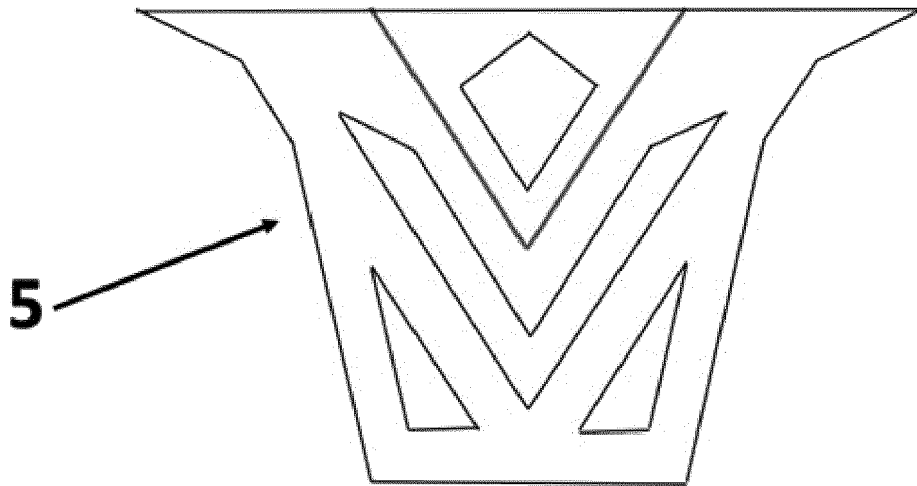


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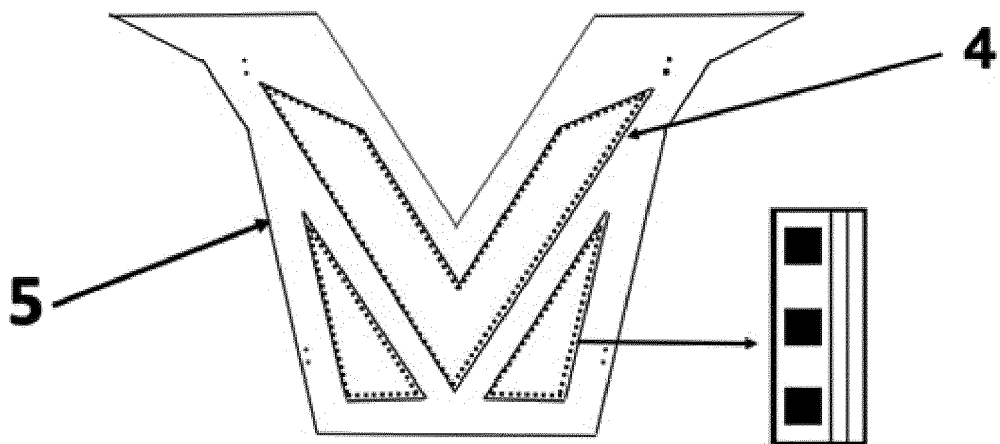


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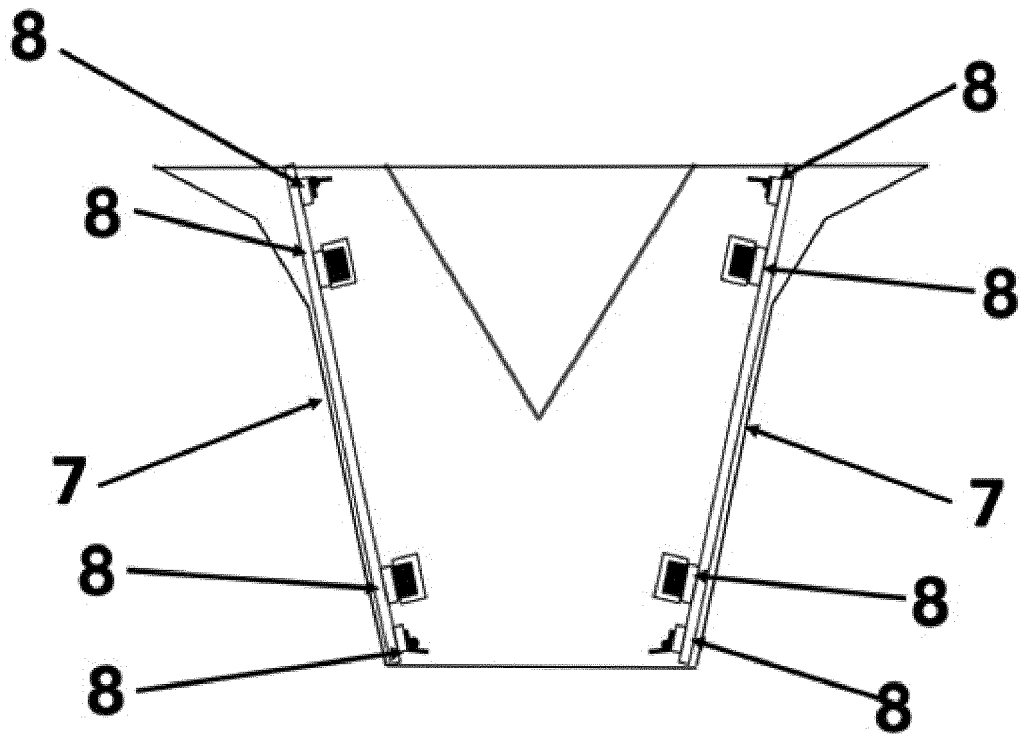


Figure 9

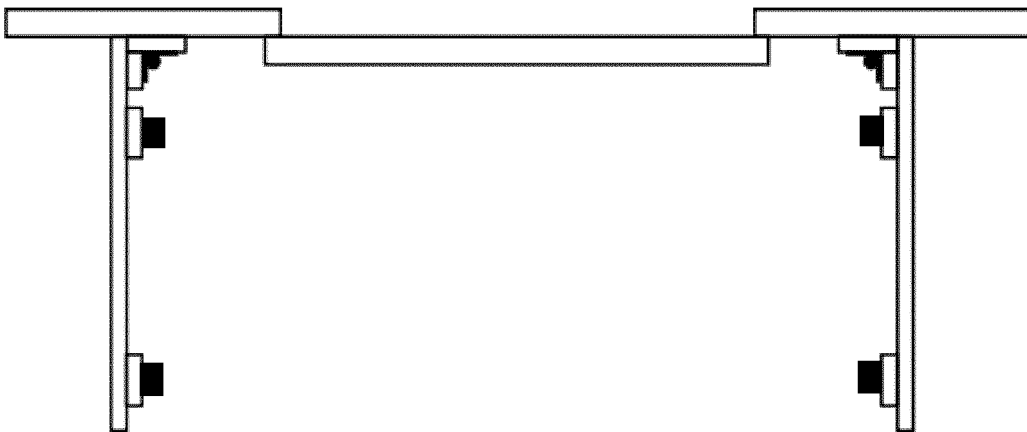


Figure 10

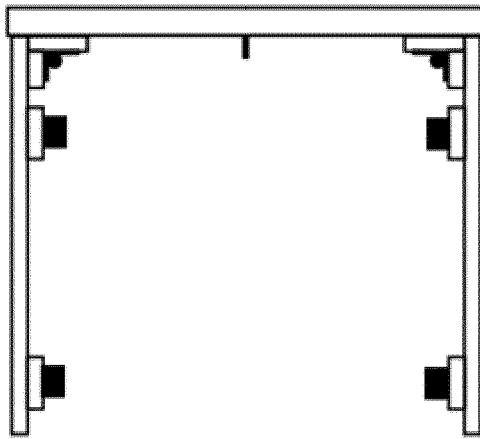


Figure 11

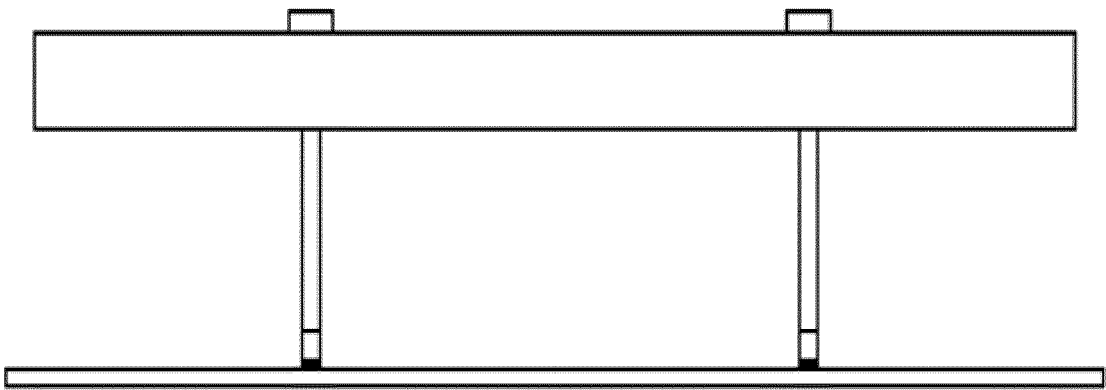


Figure 12

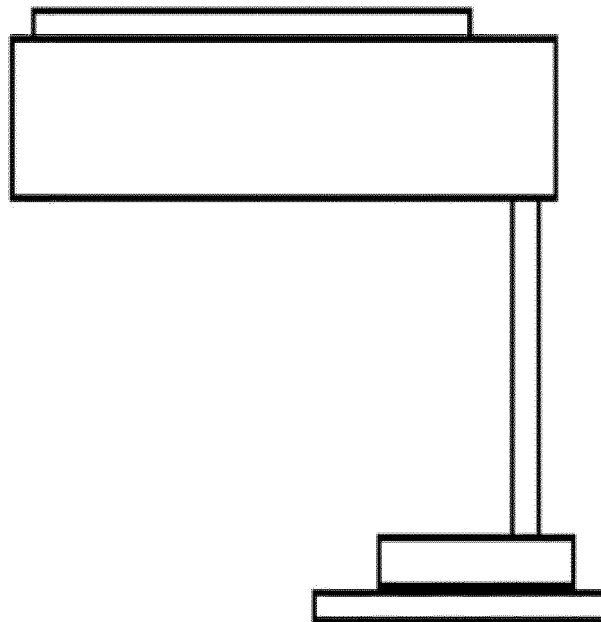


Figure 13



Figure 14

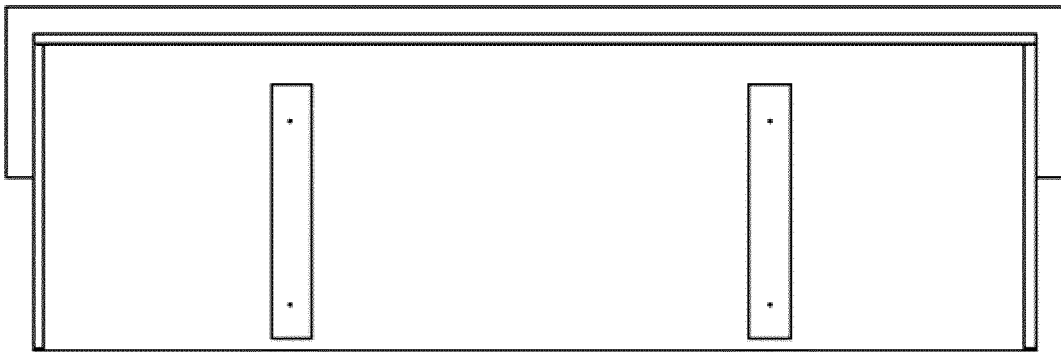


Figure 15

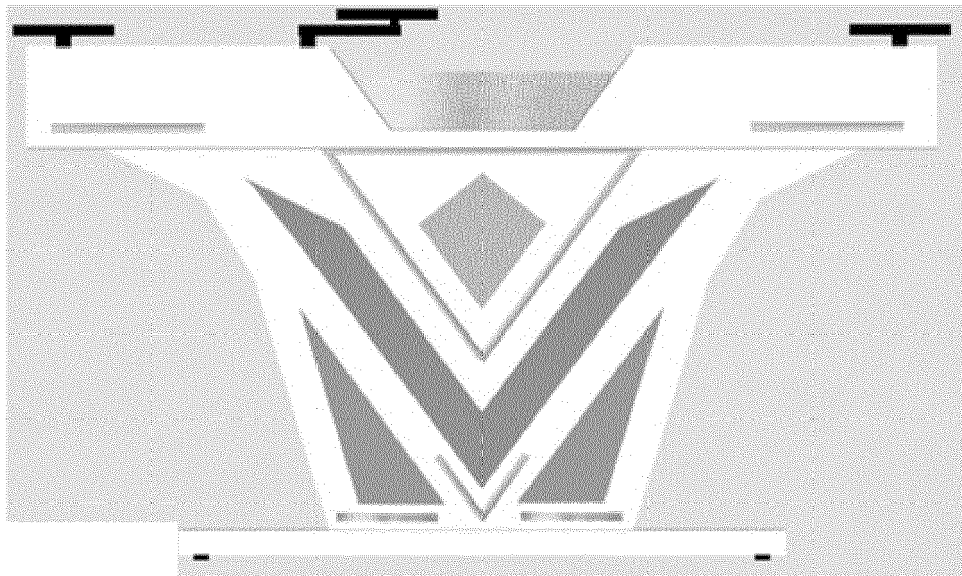


Figure 16

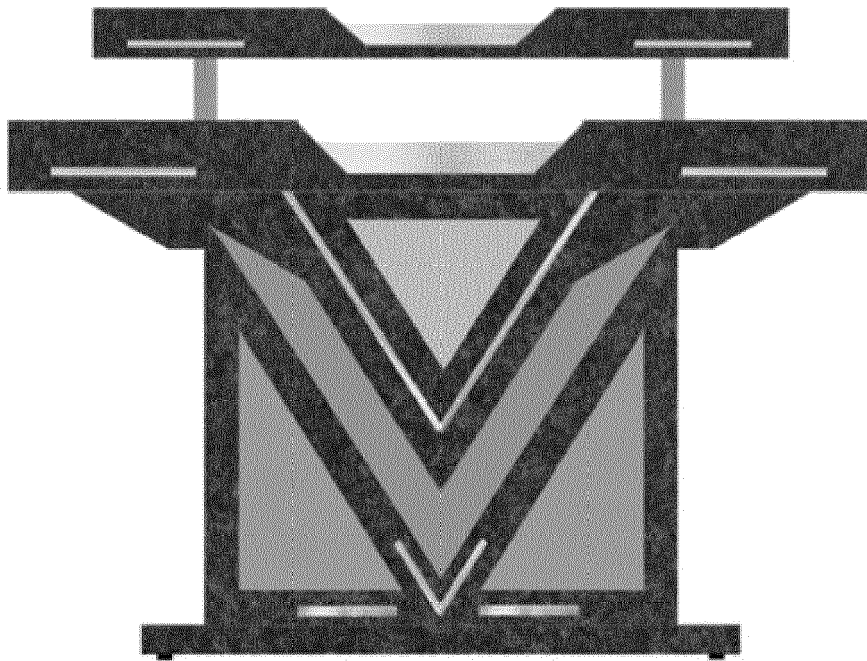
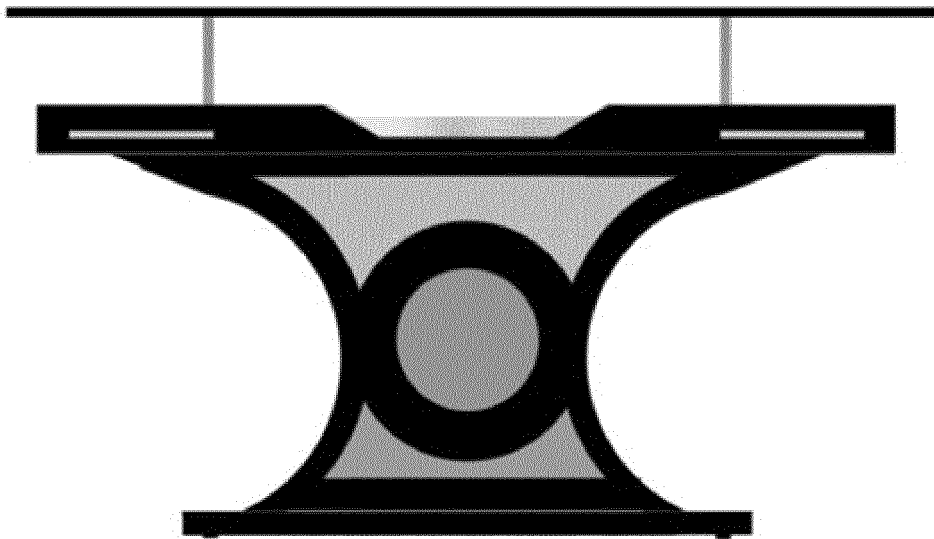


Figure 17





EUROPEAN SEARCH REPORT

Application Number
EP 20 18 1514

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DOCUMENTS CONSIDERED TO BE RELEVANT			
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X	WO 2018/032064 A1 (CAMUNHA JOSE RODRIGO [BR]) 22 February 2018 (2018-02-22) * figures 1-16 *	1,2	
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			TECHNICAL FIELDS SEARCHED (IPC)
			A47B A47F
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 30 October 2020	Examiner Linden, Stefan
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EPO FORM 1503 03.02 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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30-10-2020

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