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(12) # EUROPEAN PATENT SPECIFICATION

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(54) **Box-like structured base for metal shelvings for furnishing.**

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Description

The invention refers to a shelving supporting base including: a box shaped structure having a first lower portion and a second upper portion; shelf engaging means, provided on said second upper portion of said box shaped structure, opposite said first lower portion, for connecting a shelf to said base; and connection means for connecting an upright to said base, according to the preamble of claim 1. Such a base is known from DE-A-3 028 552.

Shelvings formed with said bases may be placed agaist a bearing wall or matched all together to form structures in the interior design of shops or the like, to provide two fronts of items arranged for display purposes. These shelvings must meet hight strength and aesthetic requirements and must be inexpensive to produce.

A base of the above mentioned kind is known from GB-A-1 557 188. The display apparatus disclosed in GE-A-1 557 188 includes a supporting base having a box shaped structure formed by a tubular beam exhibiting a rectangular cross section. The upper portion of the beam is provided with slots wherein connecting elements are inserted, for the connection of a shelf to said supporting base. A separate, U-shaped intermediate adaptor is inserted within the tubular beam to connect the upright to the base. Several separate elements are therefore necessary to connect the base to the other members of the display apparatus, namely the shelves and the upright.

DE-A-30 28 552 discloses a display unit with a base which has limited strength and is not sufficiently rigid. Separate connection members are provided for connecting the upright to the respective base.

The invention relates to an improvement in a shelving supporting base of the above mentioned kind, as set forth in claim 1.

Further advantageous features of the base according to the invention are set forth in the dependent claims.

The drawing shows a possible embodiment of the invention, and in particular:

Fig.1 shows a side view and partial section taken on line I-I of Fig.3;

Fig.2 is a section taken on line II-II of Fig.1;

Fig.3 is an end view from the right to the left of Fig.1;

Figs. 4 and 5 show an ensamble perspective view of a shelving placed on the floor and an end view of a double shelving, respectively.

Referring first to Figs 4 and 5, reference number 1 generally indicates a box-like base for shelvings of the above mentioned type, to which a respective metal upright 3 is connected. Each upright 3 is provided with slots for the connection of shelves 5, which are suitably spaced apart from one another and extend in a cantilever fashion along the front of the shelving.

Structures of this kind are known per se and, in the known structures the base 1 is usually a box like structure made from two shells of metal sheet suitably matched to one another and welded along respective contact edges. The known bases are not very satisfying from an aesthetic point of view and have some drawbacks as far as their resistance, the connection of the uprights and the connection of the supporting feet are concerned. These and other drawbacks are eliminated by the structure according to the invention.

According to what is illustrated in the attached drawing, each base 1 is substantially formed by a continuous metal sheet, which is U-shaped in its lower part, i.e. which is formed by two opposite side panels 11 which are integral with a lower intermediate portion 13, said panels and said portion forming a U-shaped cross section. The box like structure is upwardly closed by edged portions 11A of the side panels 11, which are mutually welded. Each edge portion 11A has an end lip 11B, the end lips 11B being slightly spaced apart so as to receive terminal folded edges of the shelves 5A which are made to rest directly on said bases 1.

As above stated, the bases are shaped in their front and rear ends so as to allow engagement with other components. In particular, the outer ends will be closed by appendixes and side panels 11 which are folded in such a manner as to close the box like structure and, if required, to allow mounting of front coverings between adjacent bases. In their rear parts the bases are shaped with appendixes like those shown at 15, 17 and 19 for the connection of the respective uprights. More particularly, the appendixes 15 and 17 cooperate with slots formed in the uprights, and the appendixes 19, wich are spaced apart of a greater extent, engage the lower end of the upright when the latter is mounted and rests within slots 21 formed by appendixes 19.

According to an advantageous further embodiment, which is made possible by the U-shaped box-like structure described hereinabove, the connection region 13 in correspondence of the rear end of the base, i.e. in correspondence of the appendixes 19, is reinforced by an additional component 23 which has the same shape as the lower part of the box-like struture 11, 13, 11, of the appendixes 19 and of the slot 21, so as to reinforce the end portion of the base and the appendixes 19. This reinforcement prevents deformations and, in particular, avoids widening of the slots 21 which are subject also to a horizontally oriented stress applied by the uprights. The stiffeners 23 do not

alter the appearance of the base and do not increase the overall dimensions thereof since they are housed within the U-shaped box-like structure according to the invention.

Supporting feet can be easily applied along the connection region 13. Connection and adjustment components for said feet, which are adjustable by means of screws, can also be applied along said connection region 13. Numeral 25 designates the components wherein the feet for supporting the shelving on the floor are housed. Said components provides for a screw-adjustment of the feet.

The weight of the goods placed on the shelving is transmitted through the uprights 3, in particular to the rear feet. The latter are engaged in correspondence of the stiffener 23. In this area the resistance is higher than that of the metal sheet alone, forming the base. The structure is therefore able to provide an extremely rational arrangement also of the base supporting components and of the shelving supporting components.

Claims

1. A shelving supporting base (1) including: a box shaped structure (11, 13), having a first lower portion (13) and a second upper portion; shelf engaging means (11B, 11B), provided on said second, upper portion of said box shaped structure, opposite said first lower portion, for connecting a shelf (5A) to said base (1); and connection means (15, 17, 19) for connecting an upright (3) to said base (1); a single bent metal sheet forming; said first lower portion (13); side walls (11) extending from said lower portion (13) toward said second upper portion; upper edges (11A, 11A), opposite said lower portion (13), which are mutually welded to complete said box shaped structure (11, 13); and lips (11B, 11B) extending from said upper edges (11A, 11A) and forming a channel for the connection of said shelf (5A); said shelving supporting base (1) being characterized in that said connection means (15, 17, 19) are appendixes (15, 17, 19) arranged at the rear end of said base (1) and formed by said single bent metal sheet.

2. A shelving supporting base (1) according to claim 1, wherein each of said connecting means (15, 17, 19) comprises a pair of similar appendixes formed on the opposed side walls (11) of the base (1).

3. Shelving supporting base according to claim 1 or 2, including support feet (25) connected to said first, lower portion (13) of said box shaped structure.

4. Shelving supporting base according to claim 1, 2 or 3, wherein said lower portion (13) is provided with an extension for the connection of the upright (3), and that a stiffener (23) is provided within said box shaped structure, said stiffener (23) being welded to said lower portion (13) and developing along said extension.

Patentansprüche

1. Sockel (1) zum Tragen eines Regalmöbels mit: einem kastenförmigen Aufbau (11, 13) mit einem unteren ersten Teil (13) und einem oberen zweiten Teil; Regalboden-Eingriffsmitteln (11B, 11B), die an dem oberen zweiten Teil des kastenförmigen Aufbaues gegenüber dem unteren ersten Teil vorgesehen sind, um einen Regalboden (5A) an dem Sockel zu befestigen; und Verbindungselementen (15, 17, 19) zum Verbinden eines Pfostens (3) an dem Sockel (1); einem einzigen gebogenen Metallblech, welches bildet: den unteren ersten Teil (13); Seitenwände (11), die sich ausgehend vom unteren Teil (13) zum oberen zweiten Teil erstrecken; obere Ränder (11A, 11A) gegenüber dem unteren Teil, welche miteinander verschweißt sind, um den kastenförmigen Aufbau (11, 13) zu vervollständigen, und Lappen (11B, 11B), die sich ausgehend von den oberen Rändern (11A, 11A) erstrecken und einen Kanal zur Verbindung mit dem Regalboden (5A) bilden, wobei der ein Regalmöbel tragende Sockel (1)
dadurch **gekennzeichnet** ist, daß die Verbindungsgelemente (15, 17, 19) Verlängerungen (15, 17, 19) sind, die am rückwärtigen Ende des Sockels (1) angeordnet sind und durch das einzige, gebogene Metallblech gebildet sind.

2. Sockel (1) zum Tragen eines Regalmöbels nach Anspruch 1, wobei jedes der Verbindungselemente (15, 17, 19) ein Paar ähnlicher Verlängerungen aufweist, die an den einander gegenüberliegenden Seitenwänden (11) des Sockels (1) ausgebildet sind.

3. Sockel zum Tragen eines Regalmöbels nach Anspruch 1 oder 2, mit Tragfüßen (25), die mit dem unteren ersten Teil (13) des kastenförmigen Aufbaues verbunden sind.

4. Sockel zum Tragen eines Regalmöbels nach Anspruch 1, 2 oder 3,
wobei der untere Teil (13) mit einer Verlängerung zur Verbindung mit dem Pfosten (3) versehen ist und wobei in dem kastenförmigen Aufbau eine Versteifung (23) vorgesehen ist,

die mit dem unteren Teil (13) verschweißt ist und entlang der Verlängerung verläuft.

Revendications

1. Base de support de meuble à étagères (1), comportant : une structure en forme de boîte (11, 13), comportant une première partie inférieure (13) et une deuxième partie supérieure ; des moyens de mise en prise d'étagères (11B, 11B), disposés sur ladite deuxième partie supérieure de ladite structure en forme de boîte, à l'opposé de ladite première partie inférieure, pour raccorder une étagère (5A) à ladite base (1) ; et des moyens de raccordement (15, 17, 19) pour raccorder un montant (3) à ladite base (1) ; une feuille métallique pliée unique formant : ladite première partie inférieure (13) ; des parois latérales (11) s'étendant de ladite partie inférieure (13) à ladite deuxième partie supérieure ; des bords supérieurs (11A, 11A), à l'opposé de ladite partie inférieure (13), qui sont mutuellement soudés de façon à achever ladite structure en forme de boîte (11, 13) ; et des lèvres (11B, 11B) s'étendant à partir desdits bords supérieurs (11A, 11A) et formant un canal pour le raccordement de ladite étagère (5A) ; ladite base de support de meuble à étagères (1) étant caractérisée en ce que lesdits moyens de raccordement (15, 17, 19) sont des appendices (15, 17, 19) disposés à l'extrémité arrière de ladite base (1) et formés par ladite feuille métallique pliée unique.

2. Base de support de meuble à étagères (1) selon la revendication 1, dans laquelle chacun desdits moyens de raccordement (15, 17, 19) comporte une paire d'appendices similaires formés sur les parois latérales opposées (11) de la base (1).

3. Base de support de meuble à étagères selon la revendication 1 ou 2, comportant des pieds de support (25) raccordés à ladite première partie inférieure (13) de ladite structure en forme de boîte.

4. Base de support de meuble à étagères selon la revendication 1, 2 ou 3, dans laquelle ladite partie inférieure (13) est munie d'une extension pour le raccordement du montant (3), et dans laquelle un raidisseur (23) est présent à l'intérieur de ladite structure en forme de boîte, ledit raidisseur (23) étant soudé à ladite partie inférieure (13) et se développant le long de ladite extension.

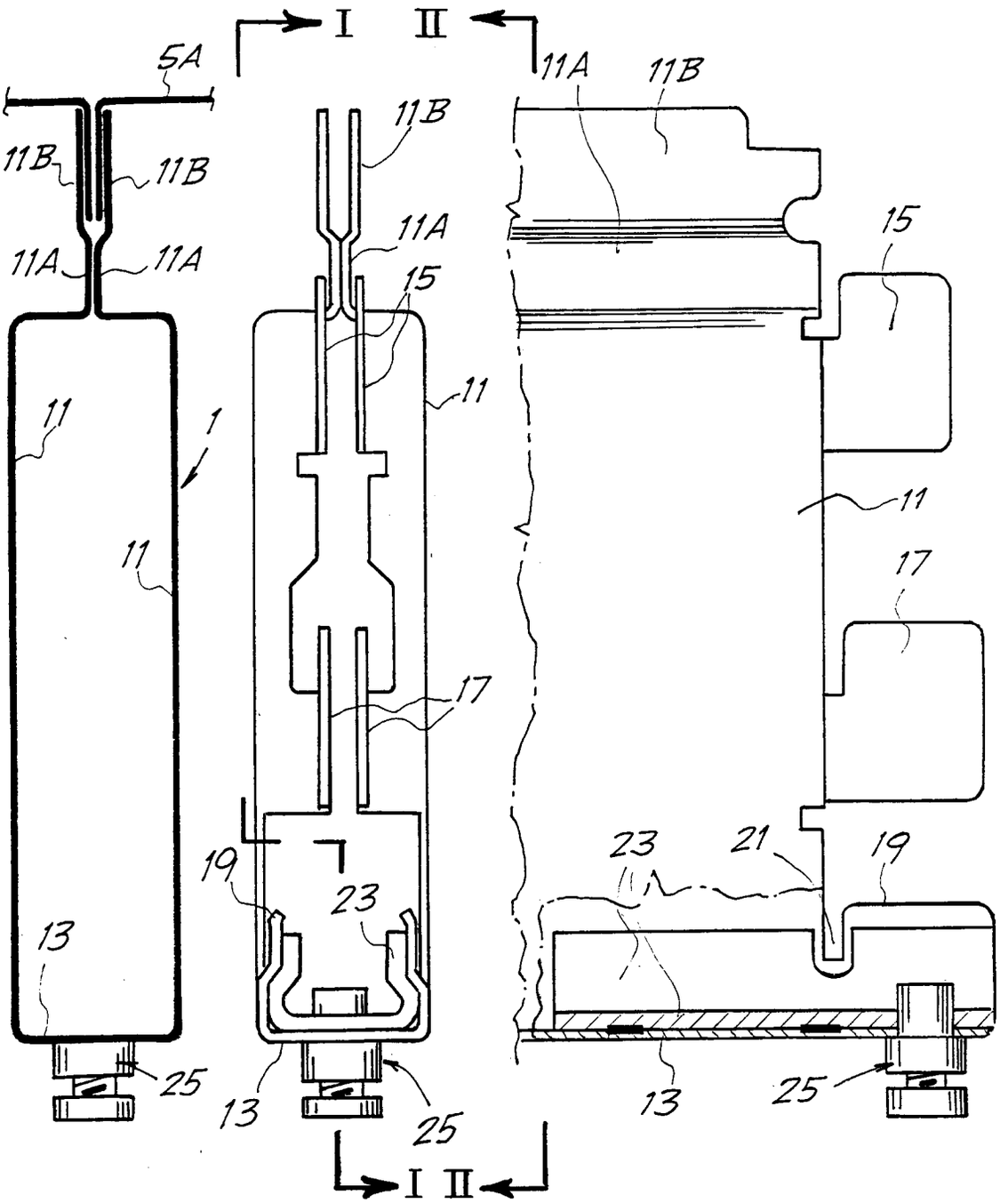


FIG. 2 FIG. 3 FIG. 1

FIG. 5

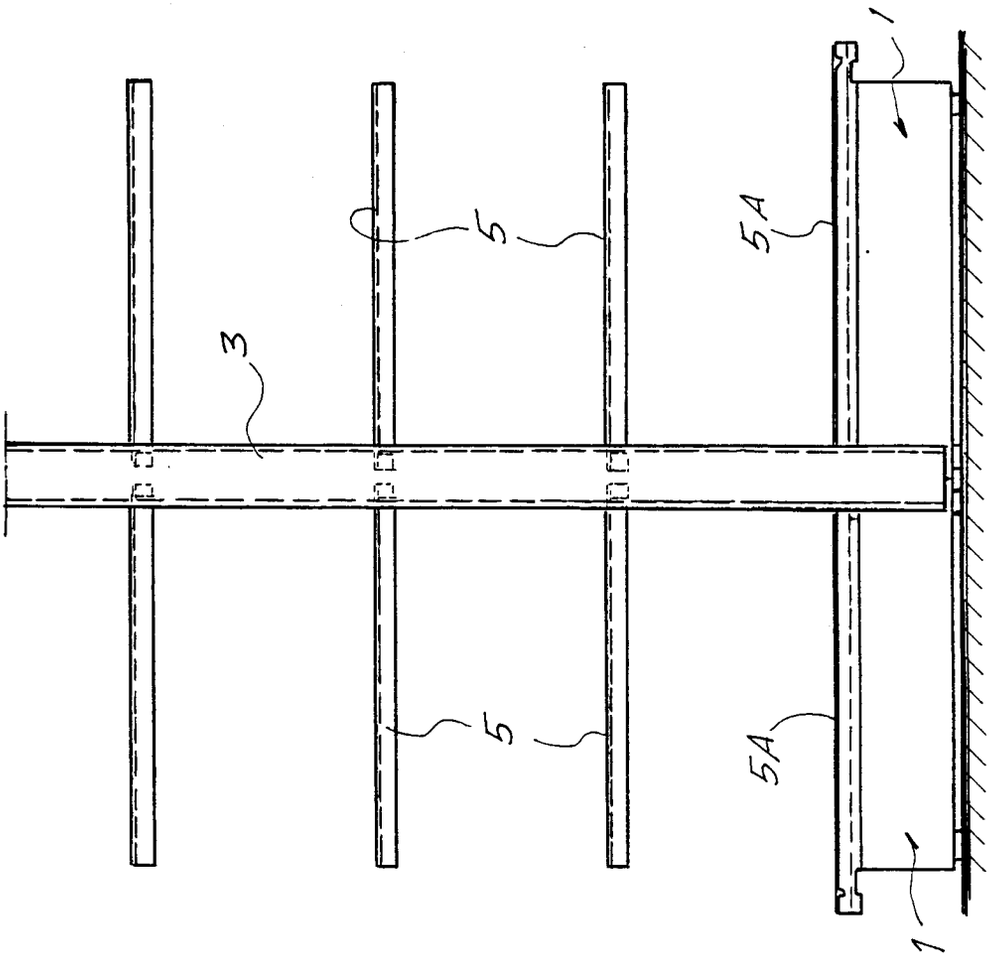


FIG. 4

