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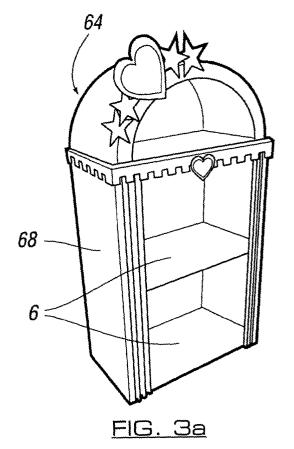
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(54) Item of furniture

(57) An item of furniture is provided including frame means and substantially flexible material located with said frame means to form a part or whole of one or more of the base, side walls, top and/or end walls of said item of furniture. The shape of the frame means when assembled is associated with one or more images, characters, lines, shapes, photographs and/or text provided on the flexible material.



Description

[0001] This invention relates to an item of furniture, and particularly, although not necessarily exclusively to an item of furniture having storage facilities.

[0002] Most items of furniture are rigid structures, the components forming the structure being fixedly attached together. As such, conventional items of furniture are often large, cumbersome and difficult to construct and/or transport. Flat packed items of furniture are known but such items often require special tools for allowing construction thereof, such as screw drivers, hammers and/or similar. In addition, the panels forming the furniture are generally rigid and are often difficult and heavy to manipulate for assembly.

[0003] Although it is known to provide furniture including a frame over which flexible material can be located, such types of furniture are generally not aesthetically pleasing, are purely functional and provide only limited interest to a user, particularly if the user is a child.

[0004] It is therefore an object of the present invention to provide an item of furniture which is quick and easy to assemble, which is inexpensive to purchase and which is lightweight and compact prior to assembly, yet sturdy when constructed, thereby increasing the ease with which the item of furniture can be transported and/ or stored.

[0005] It is a further object of the present invention to provide an item of furniture which has an improved aesthetic appearance and provides greater interest to a user of the same.

[0006] According to a first aspect of the present invention there is provided an item of furniture, said item of furniture including frame means and substantially flexible material located with said frame means to form a part or whole of one or more of the base, side walls, top and/or end walls of the item of furniture, characterised in that the shape of the frame means when assembled is associated with one or more images, characters, lines, shapes, photographs and/or text provided on the flexible material in use.

[0007] In one embodiment the outer shape of the frame means typically corresponds substantially to the outer shape of one or more images, characters, shapes, lines, photographs and/or text provided on the outer surface of the flexible material.

[0008] Preferably the frame means includes a plurality of frame members joined together by attachment means to form the frame in the form of said item of furniture. The frame members are typically formed from a substantially rigid material.

[0009] The frame members are preferably detachably attached together, thereby allowing the item of furniture to be assembled and disassembled quickly and easily as required.

[0010] Preferably the attachment means for attaching the frame members together in a required orientation include any or any combination of one or more clips, ad-

hesive, sleeve members, screws, nuts and bolts, ties, clamping members, connection pieces and/or the like.

[0011] The frame members typically include a plurality of substantially horizontal members and a plurality of substantially upright or vertical members when the furniture unit is in an assembled form.

[0012] In one embodiment the flexible material is in the form of a cover which is located over or with said frame means when assembled. The frame means maintains the material in a required shape to form at least one or more external surfaces of the item of furniture.

[0013] The flexible material can be held in position with respect to the frame by connection means, via gravity, via friction fit and/or the like.

[0014] The connection means can include elastic, ties, VELCRO, stitching and/or similar.

[0015] In an alternative embodiment the flexible material is located with one or more of said frame members and moved with said frame members on assembly/dismantling of the item of furniture.

[0016] In one embodiment the material is provided as a single article which is located with the frame means. Alternatively, the material can be provided in two or more portions. The portions can be joined together or can remain separate as required.

[0017] Fastening Means can be provided for fastening adjacent portions of material together, such as for example, for fastening door portions of the item of furniture together. The fastening means can include any or any combination of VELCRO, zips, ties, clips and/or the like.

[0018] The one or more images, characters, lines, shapes, photographs and/or text provided on the flexible material can be stitched thereon, printed thereon, tied thereto, adhered thereto, be integral therewith and/or the like.

[0019] In one embodiment the item of furniture is in the form of a wardrobe. The wardrobe can include one or more regions of hanging space for garments and/or shelving for location of one or more items thereon. A hanging rail can be provided in conjunction with the frame if required. One or more shelves can also be provided for location with the frame. The shelves can be formed from flexible material or can be formed from substantially rigid material. Material can be provided to cover the shelves if required.

[0020] Preferably if the image of a normally movable object is provided on a part of the flexible material, said flexible material and/or frame part corresponding to said flexible material is also movable to increase the realism of the image being depicted on the furniture item to the user. For example, if an image of a door which is normally openable between open and closed positions is provided on the material, the material and/or frame associated with the material depicting the door is also typically movable between open and closed positions.

[0021] In an alternative embodiment the item of furniture is in the form of a chest of drawers. Draw units can

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be provided for location with the frame and/or shelves provided with the frame as required.

[0022] Other items of furniture can be constructed in accordance with the present invention, such as a vanity unit, desk or similar.

[0023] In one embodiment one or more pelmets are provided on the item of furniture from which the flexible material, a cover or curtain can hang.

[0024] According to a further aspect of the present invention there is provided a method of construction of frame means with flexible material for forming an item of furniture, said method including the steps of attaching together a plurality of frame members in a pre-determined arrangement to form the frame means and attaching flexible material to and/or over said frame means to form said item of furniture.

[0025] According to a yet further aspect of the present invention there is provided a connection member for allowing the attachment of two or more frame members together for forming an item of furniture.

[0026] According to a further aspect of the present invention there is provided an item of furniture, said item of furniture including frame means and substantially flexible material located with said frame means to form a part or whole of one or more of the base, side walls, top and/or end walls of the item of furniture, characterised in that the substantially flexible material is substantially complementary in shape of the shape of the frame when assembled.

[0027] Preferably the flexible material substantially follows the contours of said frame means.

[0028] The present invention has the advantage that no special tools are required to construct the item of furniture and the same can be assembled and dismantled both quickly and easily. The flexible material is typically folded and stored when the frame structure is dismantled. The aesthetic design on the flexible material or cover can be fully printed and the invention allows flexible styling which can be used to form any required item of furniture.

[0029] Embodiments of the present invention will now be described with reference to the accompanying figures, wherein:

Figures 1a and 1b illustrate an assembled view of a frame for a round arch wardrobe and an exploded view of the frame respectively;

Figures 2a and 2b illustrate an assembled view of a frame for a traditional arch wardrobe and an exploded view of the frame respectively;

Figures 3a-3f illustrate a wardrobe assembly according to an embodiment of the present invention;

Figure 4 illustrates a wardrobe assembly according to a further embodiment of the present invention;

Figures 5a-5d illustrate a wardrobe assemble according to a yet further embodiment of the present invention;

Figures 6a and 6b illustrate an assembled view of a frame for a traditional arch chest of drawers and an exploded view of the frame respectively;

Figures 7a and 7b illustrate an assembled view of a frame for an arch chest of drawers and an exploded view respectively;

Figures 8a-8e illustrate a chest of drawers in different stages of assembly;

Figures 9a-9e illustrate a chest of drawers according to a different embodiment of the present invention;

Figure 10 illustrates a chest of drawers according to a further embodiment of the present invention; and

Figures 11a-11c illustrate a further embodiment of a combo storage unit in different stages of assembly.

[0030] Referring firstly to figures 1a-1b, there is illustrated an item of furniture in the form of a wardrobe frame 2. The wardrobe frame 2 includes a plurality of upright frame members in the form of rods 4 and a plurality of shelving panels 6 which are supported by a plurality of horizontal frame members 8.

[0031] Connection portions 10 are provided for the connection of the horizontal frame members 8 with rods 4. The connection portions 10 include an arm portion 12 with channel portions 14 provided at either end 16, 18 thereof. Openings 20, 22 provided at opposite ends of the channel portions 14 receive ends 24, 26 of rods 4 respectively in use.

[0032] In addition, apertures 28 provided on the inner surface of the channel portions 14, adjacent ends 16, 18 thereof, receive ends 30, 32 of horizontal frame members 8.

[0033] Two further apertures 34, 34' are provided between ends 16, 18, and typically substantially centrally of said ends, for receiving ends 36 of further frame members 38 in a substantially horizontal orientation. Apertures 34, 34' are typically vertically aligned (i.e. aperture 34' is located below aperture 34).

[0034] A support strut 40 is provided transversally of frame members 38, 8 and is joined thereto to provide additional support for shelving panels 6. Shelving panels can engage with the frame structure or can simply rest on top of the horizontal frame members and/or connection portions.

[0035] In this example, the rods and horizontal frame members provide three shelves in the wardrobe, a bot-

tom shelf 42, an intermediate shelf 44 and a top shelf 46. However, it will be appreciated by persons skilled in the art that different numbers of rods and frame members can be used to provide different numbers of shelves as required. In addition, different sized rods and frame members can be used to provide different sized wardrobe structures.

[0036] Adjacent top shelf 46, two pairs of curved frame members 48 are provided and are joined together to form two arch members at the front and rear of the wardrobe construction respectively. Ends 40 of frame members 48 are located in uppermost apertures 20 on connection portions 10, and ends 50 are provided with complementary attachment means, which includes a protrusion member 52 on one frame member which is located in a complementary shaped aperture 54 on the adjacent frame member. Support arms 56 are provided at spaced intervals between parallel frame members 48 at the front and rear of the wardrobe construction.

[0037] A plurality of support feet 58 are provided underneath bottom shelf 42 to raise the structure a predetermined distance above a floor surface. Rubber members 60 can be provided on free ends 62 of support feet 58 to provide improved grip between the wardrobe and a floor surface.

[0038] Once the wardrobe frame structure has been assembled by a user locating the relevant frame members together, a cover 64 can be provided therewith, as shown in figures 3a, 3c-3f. The cover 64 is formed from substantially flexible material, thereby allowing the same to be manipulated sufficiently for location over the frame structure. The shape of cover 64 is such that when assembled with the frame 2 it forms a rear wall 66, side walls 68 and top 70. The front of the wardrobe is divided into an upper part 72 and a lower part 74. When the cover is assembled over the frame, the cover is typically pulled taut over the frame.

[0039] Upper front part 72 includes a closure portion 73 and a border portion 75. Closure portion 73 is attached to border portion 75 along an intermediate portion 74 and is detachably attached to border portion 75 along curved edge 76 via attachment means in the form of a zip.

[0040] Lower front part 74 includes two movable curtain members 78 which extend substantially the full length between intermediate portion 74 and the bottom shelf 42 and can be moved between open and closed positions, as shown in figures 3d and 3e respectively. A rail member is typically provided to allow movement of the curtain members between said open and closed positions.

[0041] Designs are provided on the outer surface of cover 64, some of which correspond to the shape of the wardrobe 2. Additional designs or parts of designs 80 can be provided which protrude from the outer surface of the wardrobe to provide increased realism and interest of the subject matter depicted on the cover to a user. These additional designs or at least the protruding ele-

ments of the designs are typically provided on or formed substantially from substantially rigid material. Alternatively, the protruding parts can include frame members provided around the peripheral edge thereof and said frame members are shaped substantially to the outer shape of the protruding parts.

[0042] It can be seen that the wardrobe can include shelves 6, as shown in figure 3a, 3b, 3d and 3f or can have only an upper shelf 46, as shown in figure 3c. Any other combination of shelf arrangements can be provided as required. Furthermore, upper front portion 72 can be provided with a closure portion 73, as shown in figure 3c or without a closure portion, as shown in figure 3d.

[0043] A further example of a possible design for use with the outer cover is illustrated in figure 4, wherein cover 64 is in the form of a sports locker. The designs provided on the external surface of cover 64 correspond to the shape of the wardrobe frame 2. Thus two locker doors 80 are printed on front lower portion 74 corresponding to curtain members 78 and a grating arrangement 82 is printed on side walls 68. Additional designs in the form of a base ball glove 84 protrude from the surface of the cover 64, thereby increasing the realism of the design. Other features can also be provided on the cover, such as a handle 86, ventilation channels 88 and/or the like.

[0044] Different shaped wardrobes can be provided as required. A traditional arch shaped wardrobe frame 102 is illustrated in figures 2a and 2b. The same reference numerals are used to identify the same components as in figures 1a and 1b. Rather than four curved members 48 being provided as in figures 1a and 1b, two central curved members 104, 106 are provided at the front and rear of the wardrobe frame 102 respectively. Four corner pieces 108 are provided for attachment at a first end 110 to curved members 104, 106 and for attachment to connection portion 10 at a second end 112. The corner pieces 108 in this example have an upright portion 114 and a concave portion 116 but the corner pieces can be provided in any required shape.

[0045] A cover 118 for location with frame 102 is of a substantially complementary shape to said frame 102, as shown in figures 5a-5d. Borders 120 printed onto cover 118 correspond to the edges of frame 102, thereby increasing the realism of the cover being a rigid conventional structure. The front lower portion 74 includes two curtain type members 122 which are joined together along their adjacent edges by closure means in the form of a zip 124. Front upper portion 72 is also provided with zips or VELCRO adjacent the peripheral edges thereof to allow closure portion 73 to be removably attached to cover 118. Other aesthetic designs in the form of flowers 120 are printed onto cover 118.

[0046] Referring to figures 6a-10, there is illustrated a further item of furniture in the form of a chest of drawers. Figures 6a-6b illustrate a traditional arch chest of drawers frame 202. The frame construction is similar to that for wardrobes 2 and 102 and the same components

are identified using the same reference numerals. In the illustrated embodiment, shelving panels 6 are provided with a pivotable front panel 204 pivotally attached along a front edge 206 thereof. Thus, front panel 204 can be moved between a closed position, wherein the front panel is substantially vertical/upright and the front opening 208 of the shelf 210 is closed, and an open position, wherein the front panel 204 is pivoted outwardly of the frame 202 and the front opening 208 of the shelf 210 is open.

[0047] Uppermost shelving panel 212 forms the top surface of the chest of drawers and only a rear arched member 106 is provided for attachment to two corner pieces 108.

[0048] Cover 214 is located over the assembled frame 202. In this embodiment, the cover 214 forms the rear wall 216, side walls 218 and rear upper panel 220. Front panels 204 form the front of the chest of drawers. Designs are printed onto the cover 214 and front panels to provide the cover with the appearance of being a rigid conventional structure and to improve the aesthetic appearance of the same.

[0049] A further arrangement of a chest of drawers is shown in figures 7a and 7b. In this embodiment a round top arch chest of drawers frame 222 is shown. Only the uppermost shelf 224 is provided with a pivotal front panel 226 attached thereto in this arrangement. Shelving panel 228 provides the top of the chest of drawers. A cover 230 is located with the frame 222 to form the rear wall 232, rear panel 234 and side walls 236. As described above, designs are provided on cover 230, such as edge trimmings 238, which correspond to the shape of the frame 222.

[0050] Drawers 240 are provided for location on intermediate shelf 242 and lower shelf 244. Thus the housings for the drawers 240 are defined between shelf panels 6 and the cover 230, as supported by frame 222. Drawers 240 are freely slidable with respect to shelf panels 6 to allow access to the interior of drawers 240. **[0051]** A further example of a possible design for use with the chest of drawers is illustrated in figure 10. In this embodiment, the cover 302, fronts of the drawers 304 and outer surface of front panel 305 are printed with designs to give the appearance of a sports locker. Rear panel 306 has an aesthetic design thereon in the form of a baseball glove and ball with protruding portions 308 of the design extending beyond the frame to increase the realism of the design.

[0052] A yet further example of a possible item of furniture in the form of a storage combo unit is illustrated in figures 11a-11b, wherein the frame structure 402 is provided with a wardrobe portion 404 and a drawer portion 406. In this embodiment, the connection portions 408 intermediate the wardrobe portion and the drawer portion are provided with additional apertures thereon for the connection of the portions 404, 406 together. In addition, front panel 408 can be rolled up and fastened in this position by ties 410 to move the same to an open

position. In order to close the front of the unit, the front panel 408 can be unrolled, thereby allowing the same to extend substantially the full length of the unit.

[0053] The frame members, rods, struts, feet portions and connection portions can be formed from any required material, such as wood, metal, plastic and/or the like.

[0054] The cover can be formed from any substantially flexible material, such as a textile fabric, i.e., nylon, cotton, polyester or plastic. The material can be easily folded and unfolded between assembled and dismantled positions as often as required. One or more rigid walls can be provided with the frame structure if required.

[0055] Thus the cover and frame members define one or more compartments which can be used for storage as an item of furniture.

O Claims

- 1. An item of furniture, said item of furniture including frame means and substantially flexible material located with said frame means to form a part or whole of one or more of the base, side walls, top and/or end walls of said item of furniture, characterised in that the shape of the frame means in an assembled form is associated with one or more images, characters, lines, shapes, photographs and/or text provided on the flexible material.
- 2. An item furniture according to claim 1 character-ised in that one or more images, characters, lines, shapes, photographs and/or text is attached to the flexible material via any or any combination of stitching, printing, painting, ties or adhesive.
- An item of furniture according to claim 1 characterised in that one or more images, characters, lines, shapes, photographs and/or text is integrally formed with the flexible material.
- 4. An item of furniture according to claim 1 characterised in that the frame means includes a plurality of frame members which are joined together by attachment means.
- An item of furniture according to claim 4 characterised in that the frame members include a plurality of substantially horizontal members and a plurality of substantially vertical members when assembled.
- 6. An item of furniture according to claim 4 characterised in that the attachment means includes any or any combination of one or more clips, adhesive, sleeve members, screws, nuts and bolts, ties, clamping member or connection pieces.

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- An item of furniture according to claim 1 characterised in that the flexible material is in the form of a cover which is located over or with said frame when assembled.
- 8. An item of furniture according to claim 1 characterised in that the flexible material is held in position with respect to the frame means by any or any combination of connection means, gravity and/or friction fit.
- An item of furniture according to claim 8 characterised in that the connection means includes any or any combination of elastic, one or more ties, clips, VELCRO or stitching.
- 10. An item of furniture according to claim 1 characterised in that the flexible material is located and movable with the frame means on assembly and/or dismantling of said item of furniture.
- **11.** An item of furniture according to claim 1 **characterised in that** the flexible material is provided as a single article which is located with the frame means.
- **12.** An item of furniture according to claim 1 **characterised in that** the flexible material is provided in two or more parts.
- 13. An item of furniture according to claim 12 characterised in that fastening means are provided for joining together adjacent parts of the flexible material.
- **14.** An item of furniture according to claim 1 **characterised in that** the item is in the form of a wardrobe.
- **15.** An item of furniture according to claim 1 **characterised in that** the item is in the form of a chest of drawers.
- **16.** An item of furniture according to claim 1 **characterised in that** one or more shelve portions or draw portions are provided with said frame means.
- 17. An item of furniture according to claim 1 character-ised in that an image of an object which is capable of undergoing movement is located on a portion of the flexible material and/or frame means which is also capable of undergoing movement.
- **18.** An item of furniture according to claim 1 **characterised in that** a pelmet is provided on the furniture item.
- 19. An item of furniture according to claim 1 characterised in that the flexible material is substantially complementary in shape to the frame means when

assembled.

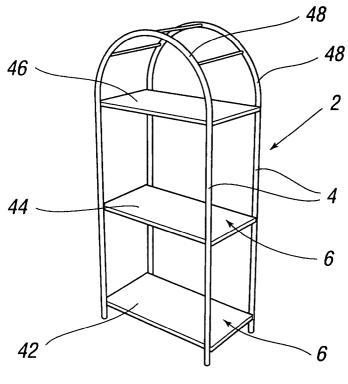
- 20. An item of furniture according to claim 1 characterised in that the flexible material is movable between folded and erect conditions for location with the frame means as often as is required.
- **21.** An item of furniture according to claim 1 **characterised in that** one or more connection means are provided for connecting one or more frame members of said frame members together.
- **22.** An item of furniture according to claim 21 **characterised in that** the connection portions include one or more apertures and/or protrusions which engage with one or more corresponding apertures and/or protrusions provided on said frame members.
- 23. An item of furniture according to claim 1 character-ised in that one or more parts of the one or more images, characters, lines, shapes, photographs and/or text provided on the flexible material protrude outwardly of the frame means and said protruding parts are provided on or are formed from substantially rigid material.
- 24. An item of furniture according to claim 1 character-ised in that the outer shape of the one or more images, characters, lines, shapes, photographs and/or text provided on the flexible material typically corresponds substantially to the outer shape of said frame means when assembled.

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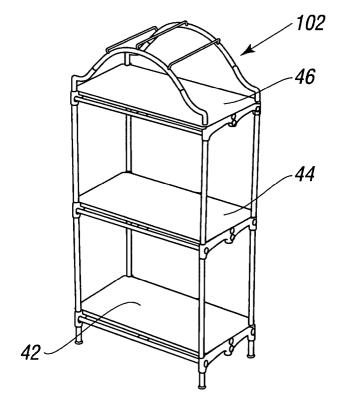
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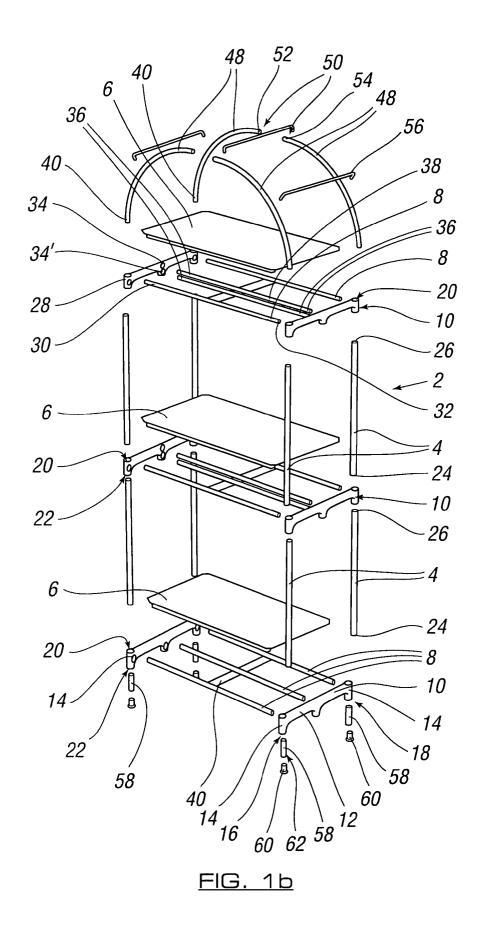
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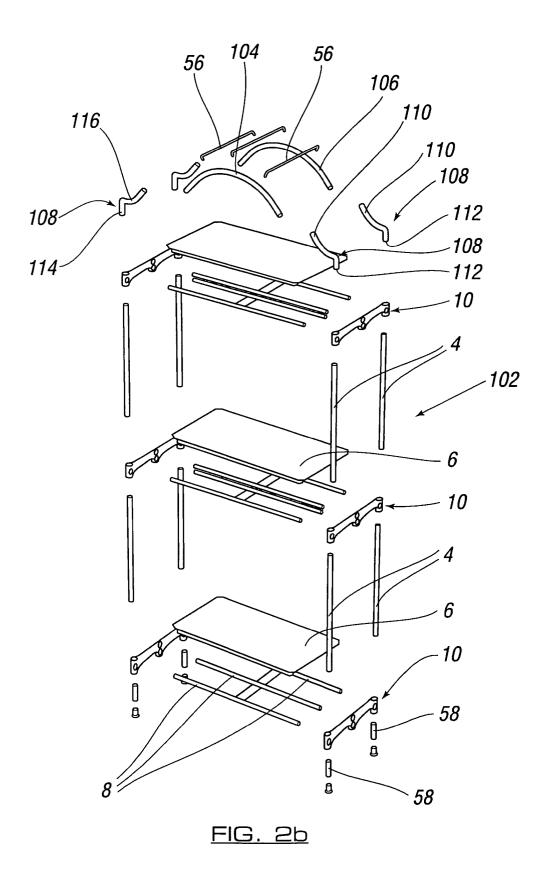


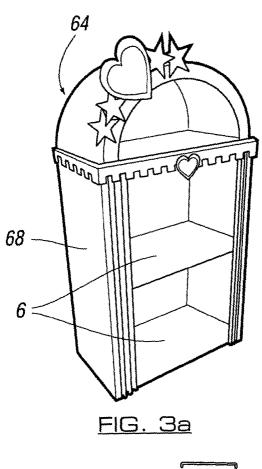


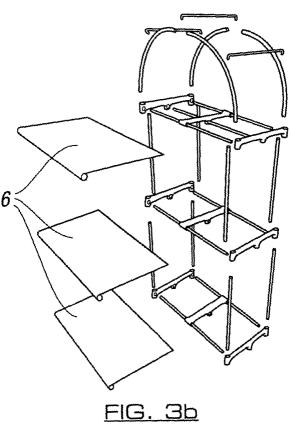


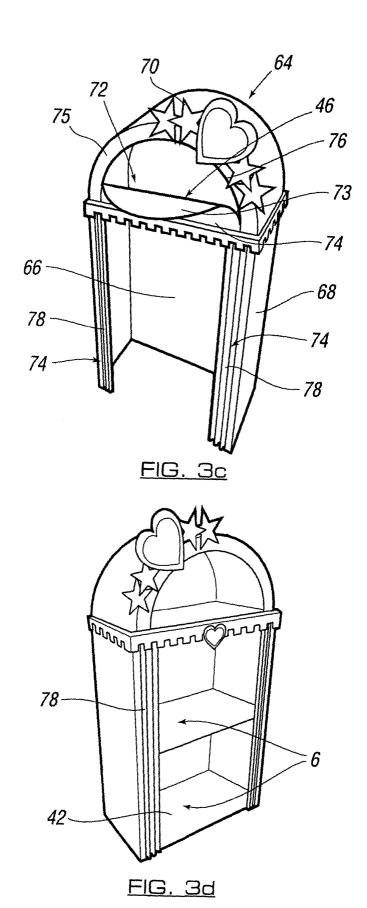
<u>FIG. 2a</u>

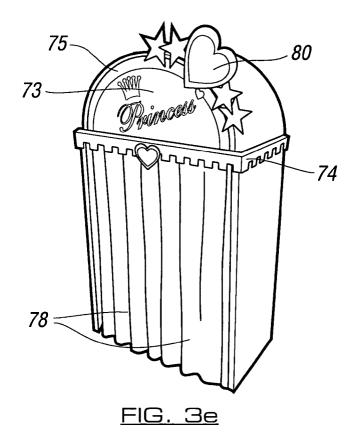


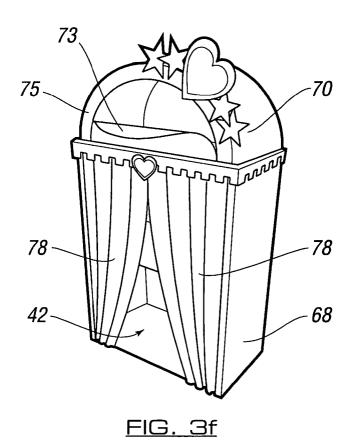


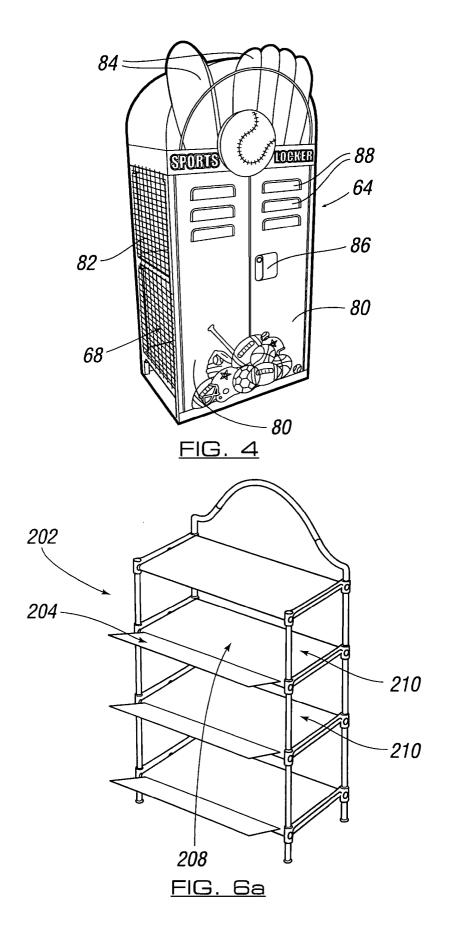


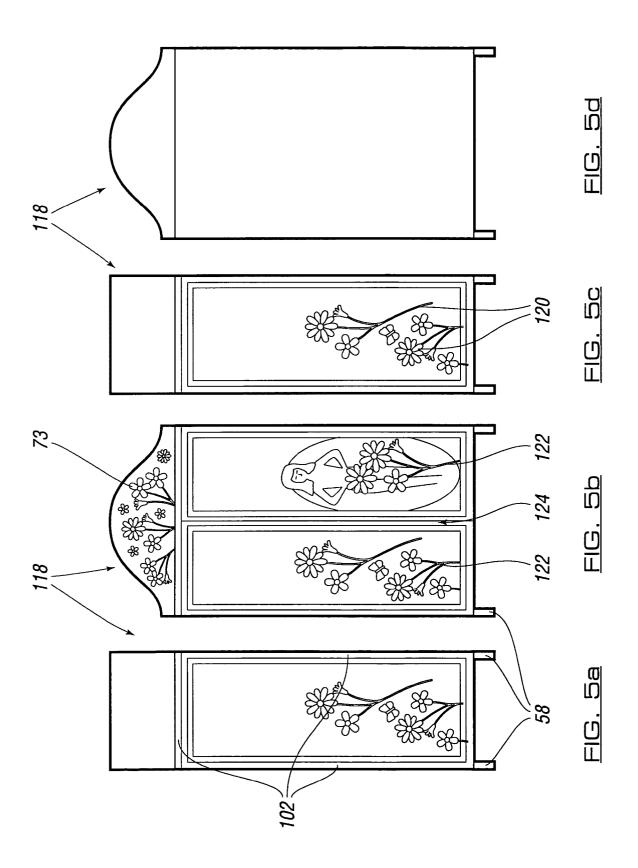


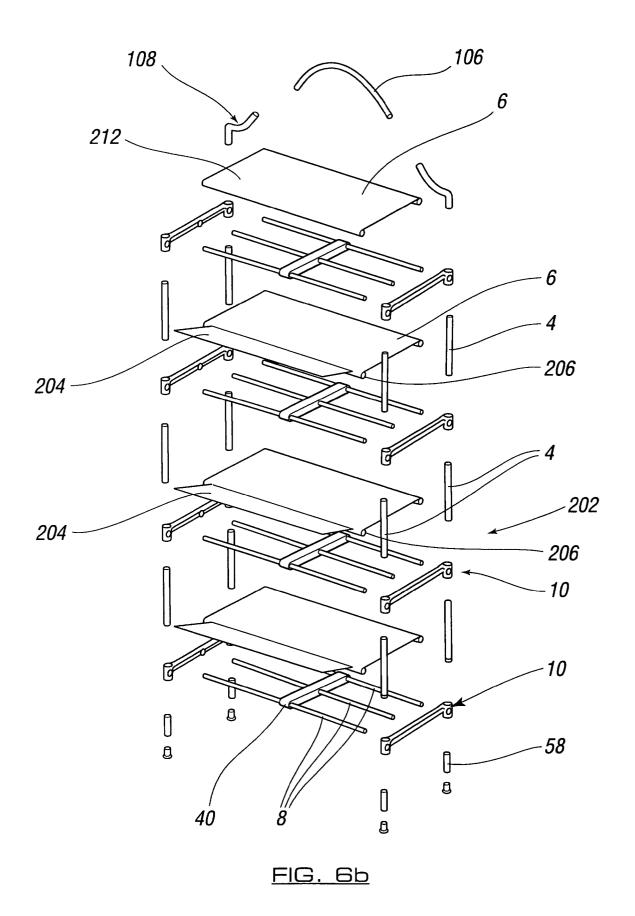












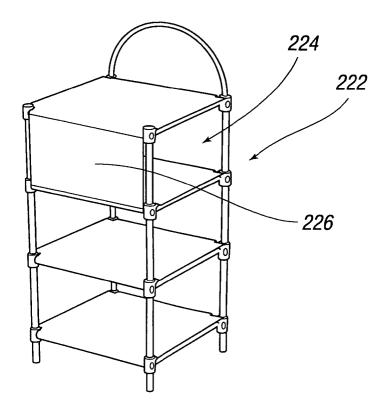
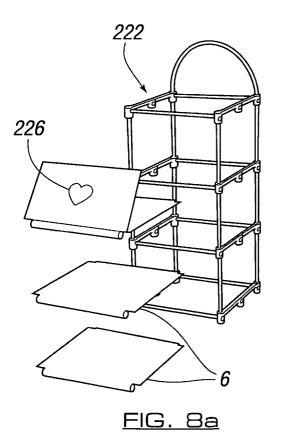
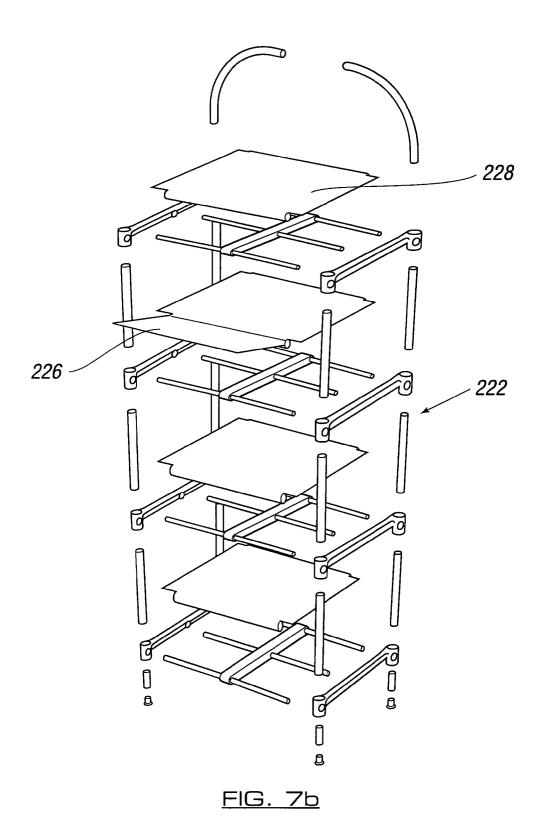


FIG. 7a





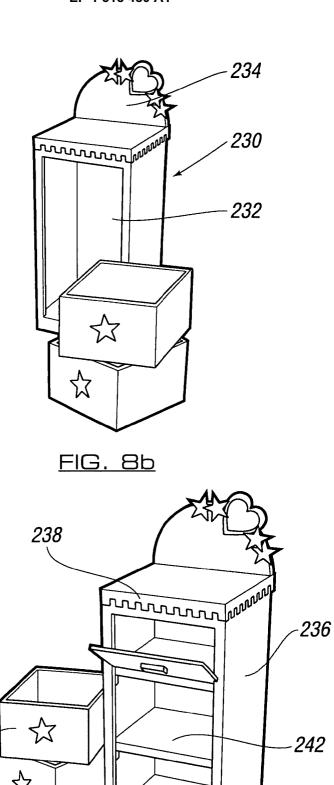
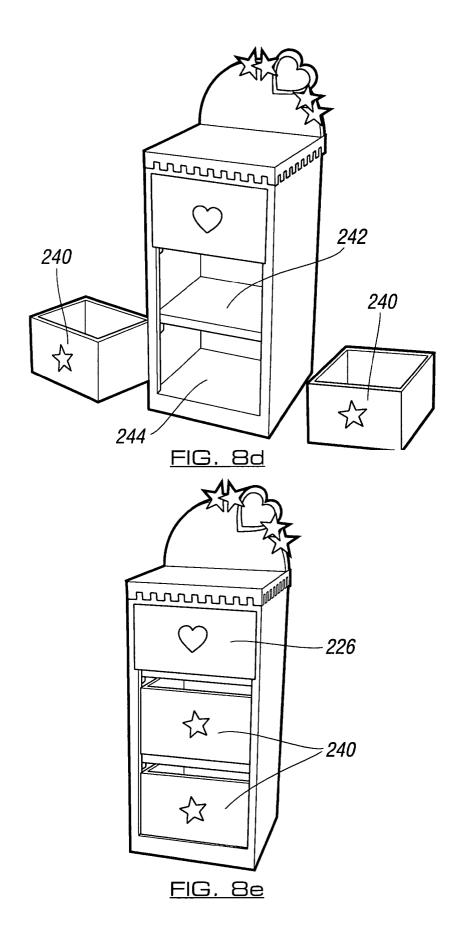
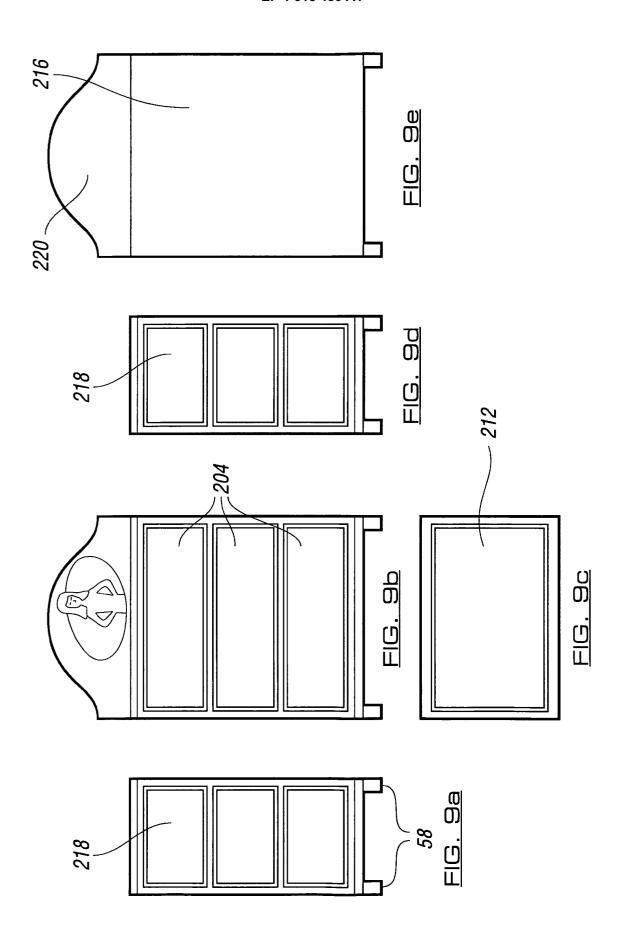


FIG. 8c

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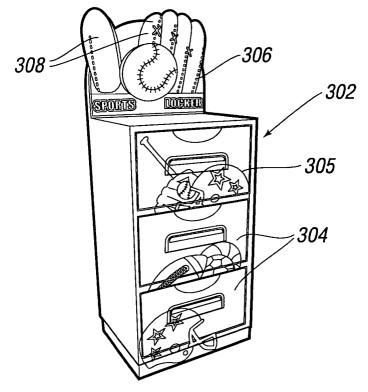
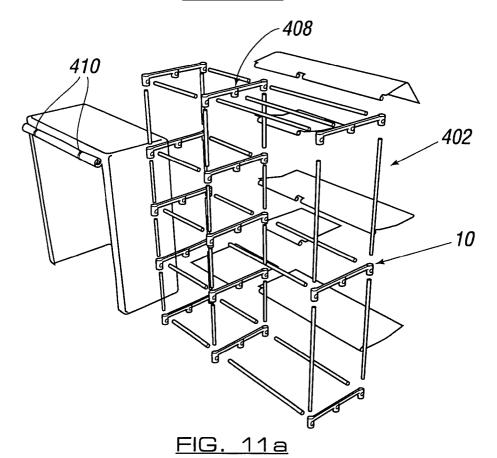
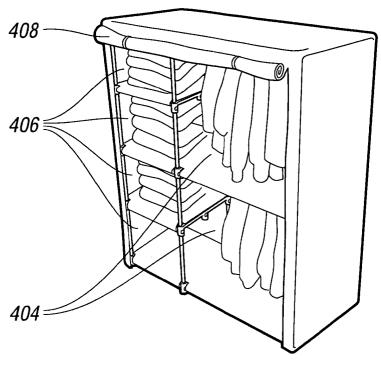
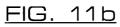
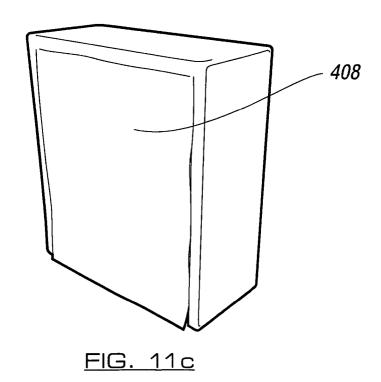


FIG. 10











EUROPEAN SEARCH REPORT

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Category	Citation of document with ir of relevant passa	ndication, where appropriate, ges	Releva to clair		CLASSIFICATION OF THE APPLICATION (Int.CI.7)	
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X : parti Y : parti docu	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anoth ment of the same category nological background	T : theory or prin E : earlier patent after the filing D : document cit L : document cit	document, but p date ed in the applica	oublished on, o tion	or	

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 04 25 4947

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