"An article of furniture"

Cross-Reference to Related Applications

[0001] The present application claims priority from Australian Provisional Patent Application No 2014903827 filed on 25 September 2014 and Australian Patent Application No. 2015203652 filed on 30 June 2015, the contents of both of which are incorporated herein by reference.

Technical Field

[0002] This disclosure relates, generally, to an article of furniture and, more particularly, to a demountable article of furniture, a furniture system including the article of furniture and to a platform for an article of furniture.

Background

[0003] Furniture is increasingly being manufactured in remote locations and shipped to its destination. Lounge room furniture, in particular, can be very bulky and voluminous increasing its transportation costs. Also, modular furniture is becoming increasingly popular as a means to enable an occupant to mix and match various pieces of furniture to obtain a desired result. This also enables the occupant, as desired, to alter the mix of pieces to change the appearance and/or utility of the furniture.

[0004] In addition, there is often a need to access a zone below the furniture, whether to retrieve articles which may have fallen under the furniture or to place components in position relative to the article of furniture. However, the article of furniture can be heavy rendering it awkward to move and/or lift.

Summary

[0005] In a first aspect, there is provided an article of furniture which includes a platform;

a seat base mounted to the platform to leave at least a part of the platform not covered by the seat base;

at least one rest displaceably mounted relative to the platform to enable access to be gained at least to that part of the platform not covered by the seat base; and

an attaching mechanism carried by the part of the platform for displaceably attaching the at least one rest to the platform, the attaching mechanism comprising at least one supporting element carried by the platform and a co-operating formation carried by the at least one rest, the at least one supporting element comprising a rod fixedly mounted to a rotatable element, the rotatable element being held rotatably captive in the part of the platform and the rod comprising two parts projecting in opposite directions from the rotatable element, a first part of the two parts being longer than a second part of the two parts and the first part co-operating with the co-operating formation of the at least one rest.

[0006] The term "rest" is to be understood to include an armrest or a backrest of the article of furniture. In some embodiments, the "rest" may also be a suitably configured seat, headrest or footrest of the article of furniture.

[0007] The supporting element may be displaceable between a first, storage position, in which it lies in a plane of the platform, and a second, operative position, in which it extends substantially perpendicularly to the plane of the platform, the co-operating formation interacting with the at least one supporting element to enable the at least one rest to be displaceable relative to the platform. The at least one supporting element may be pivotally displaceably carried by the platform so that the rest is pivotally displaceable relative to the platform.

[0008] The attaching mechanism may comprise a pair of spaced pivoting supporting elements, the supporting elements being independently, pivotally displaceable relative to each other. The at least one rest may include a co-operating formation associated with each supporting element. Each co-operating formation may comprise a socket defined in an operatively bottom surface of the at least one rest. Each socket may be lined with a liner. The liner may be in the form of a sleeve of a suitable plastics material. The plastics material may be a lubricated plastics material to facilitate insertion of the supporting

element into a passage of the sleeve. A mouth of the sleeve may define a flared opening to facilitate insertion of the supporting element into the sleeve.

[0009] In an embodiment, a foot portion may be removably attachable to the second part of the rod. It will be appreciated that, in embodiments where foot portions are not used, the second part of the, or each, supporting element may be omitted completely.

[0010] A void may be defined within the at least one rest. At least the void of the at least one rest may be lined with a fire retardant material.

[0011] In a second aspect, there is provided a furniture system which includes

an article of furniture as described in the first aspect, a void being defined within the at least one rest; and

an audio component mounted relative to the part of the platform to be received in the void defined within the at least one rest when the at least one rest is placed in position on the platform.

[0012] The platform may comprise a frame and the part of the platform may be open to a substrate on which the platform rests, the audio component being arranged, in use, on the substrate to protrude through the part of the platform.

[0013] The audio component may be a speaker assembly. The speaker assembly may comprise a cabinet in which at least one loudspeaker is mounted. Typically, the speaker assembly may be a subwoofer.

[0014] In a third aspect, there is provided a platform for an article of furniture, the platform including

a body member for supporting components, including at least one rest, of the article of furniture, the body member defining at least a part which is open to a substrate on which the platform is mountable; and

at least one supporting element displaceably carried by the body member, the at least one supporting element comprising a rod fixedly mounted to a rotatable element, the rotatable element being held rotatably captive in the part of the platform and the rod comprising two parts projecting in opposite directions from the rotatable element, a first

part of the two parts being longer than a second part of the two parts and the first part co-operating with a co-operating formation of the at least one rest of the article of furniture, the rod being displaceable, via the rotatable element, between a first position in which the rod lies substantially in a plane of the body member and a second, operative position in which the rod extends transversely to the plane of the body member to support the at least one rest of the article of furniture on the platform.

[0015] The platform may include at least two supporting elements arranged in spaced relationship on the body member, each of the supporting elements being displaceably carried by the body member.

Brief Description of Drawings

[0016] Embodiments of the disclosure are now described by way of example with reference to the accompanying diagrammatic drawings in which: –

[0017] Fig. 1 shows a perspective view of an embodiment of an article of furniture;

[0018] Fig. 2 shows a perspective view of a part of the article of furniture of Fig. 1 prior to the mounting of a rest to a platform of the article of furniture;

[0019] Fig. 3 shows a perspective view of the part of the article of furniture with foot portions attached;

[0020] Fig. 4 shows a perspective view of the part of the article of furniture with an embodiment of supporting elements, which include foot portions, of the article of furniture in their operative positions to receive the rest of the article of furniture;

[0021] Fig. 5 shows a perspective view of mounting the rest on the supporting elements of the article of furniture;

[0022] Fig. 6 shows a perspective view of the rest being pivoted relative to a platform of the article of furniture;

[0023] Fig. 7 shows a perspective view of the rest of the article of furniture pivoted to a fully upright position;

[0024] Fig. 8 shows a perspective view of a furniture system; and

[0025] Fig. 9 shows a perspective view of the furniture system of Fig. 8, illustrating assembly of the system.

Detailed Description of Exemplary Embodiments

[0026] In the drawings, reference numeral 10 generally designates an embodiment of an article of furniture. The article of furniture 10, as illustrated in the drawings is a chaise, but it will be appreciated that the article of furniture could be any similar article of furniture such as a sofa, an armchair, or the like. For ease of explanation and brevity, the article of furniture will be described below with reference to its being in the form of a chaise 10.

[0027] The chaise 10 comprises a platform 12 supporting a seat base 14. As illustrated more clearly in Figs. 2-4 of the drawings, the seat base 14 is dimensioned to leave a part 16 of the platform 12 open or uncovered when the seat base 14 is mounted in position on the platform 12. While the part 16 is illustrated as shaded, that shading represents a substrate on which the platform 12 is arranged and the part 16 is open to the substrate.

[0028] The chaise 10 includes a first rest in the form of a backrest 18 and a second rest in the form of an armrest 20. It will be appreciated that, in other embodiments, the article of furniture may have a different number of rests such as two armrests or no armrests and only a backrest.

[0029] In the illustrated embodiment, the armrest 20 is displaceably mounted relative to the platform 12 to enable access to be gained at least to the part 16 of the platform 12.

[0030] An attaching mechanism 22 is carried by, or arranged in, the part 16 of the platform 12 for displaceably attaching the armrest 20 to the platform 12. As illustrated, the attaching mechanism 22 comprises a pair of spaced pivoting supporting elements or

rods 24. Each rod 24 is fixedly mounted to a rotatable element in the form of a tubular carrier 26 rotatably arranged on an internal member (not shown).

[0031] In this regard, it is to be noted that the platform 12 comprises a frame 28 having four orthogonally arranged members 30. A cross-member (not shown) is arranged beneath the seat base 14 extending parallel to member 30.1 (Fig. 2) of the frame 28. The internal member associated with each tubular carrier 26 extends between the cross-member and the member 30.1. The tubular carrier 26 is held rotatably captive on its associated internal member in the platform 12 between the cross-member and the frame member 30.1.

[0032] Each rod 24 is pivotally displaceable between the position shown in Fig. 2 of the drawings (in which the rod 24 lies in the plane of the platform 12), a fully rotated position as shown in Fig. 3 of the drawings and an intermediate, upright position as shown, for example, in Fig. 5 of the drawings. It is to be noted that the rods 24 of the attaching mechanism 22 are independently, pivotally displaceable relative to one another.

[0033] Further, in an embodiment, each rod 24 is made up of two parts 32 and 34 projecting in opposite directions from the tubular carrier 26. The part 34 is substantially longer than the part 32. A foot portion 36 (Fig. 3) is receivable on the part 32 to serve as a foot of the chaise 10.

[0034] In another embodiment, particularly where the chaise 10 may be too heavy to be lifted easily, the frame 28 of the platform 12 may carry foot portions (not shown) and the part 32 of each rod 24 does not carry a foot portion (e.g. the embodiment shown in Fig. 7) so that the rods 24 can rotate freely without snagging the substrate supporting the article of furniture. In other words, the rods 24 are free to rotate from the position shown, for example, in Fig. 2 of the drawings to a position as shown in Fig. 7 of the drawings without lifting the platform as the rods 24 are rotated upwardly. In another variation of this embodiment, the part 32 of each rod 24 may be omitted entirely.

[0035] As shown more clearly in Figs. 5 and 6 of the drawings, the armrest 20 includes a co-operating formation associated with each rod 24. Each co-operating formation is in the form of a socket 38 opening out into a bottom surface 40 of the armrest 20. Each

socket 38 is lined by a sleeve 42 of a synthetic plastics material to facilitate sliding insertion of the part 34 of the rod 24 into its associated socket 38. A mouth of the sleeve 42 flares outwardly to facilitate insertion of a free end of the part 34 of the associated rod 24 into the sleeve 42.

[0036] As shown in Fig. 5 of the drawings, once each of the rods 24 has been raised to its upright position, the armrest 20 is lowered on to the rods 24 to locate the armrest 20 relative to the platform 12 and the seat base 14. When it is desired to access the part 16 of the platform 12, the armrest 20 is raised off one of the rods 24 and is pivoted relative to the platform 12 using the other of the rods 24 as shown in Fig. 6 of the drawings as a pivot. The armrest 20 is able to be pivoted to a fully upright position relative to the platform 12 as shown in Fig. 7 of the drawings.

[0037] The armrest 20 defines a void 44 open to the bottom surface 40 of the armrest 20. The void 44 is dimensioned to accommodate a predetermined article such as an audio component 46 (Figs. 8 and 9), the chaise 10 and the audio component together forming an embodiment of a furniture system 50.

[0038] In the illustrated embodiment, the audio component 46 is a subwoofer received in the part 16 of the platform 12. In other words, the subwoofer 46 rests on the substrate on which the chaise 10 is arranged and projects upwardly through the part 16 of the platform 12 to be received in the void 44 defined in the armrest 20 when the armrest 20 is pivoted or lowered back to the position shown in Fig. 1 of the drawings.

[0039] For safety, at least the bottom surface 40 of the armrest 20 is lined with a fire retardant material. In addition, the void 44 is also lined with the fire retardant material so that, in the event of the subwoofer 46 malfunctioning, the likelihood of the chaise 10 catching alight is reduced.

[0040] An electrical power source in the form of a power board 48 is located within the part 16 of the platform 12. The subwoofer 46 is plugged into the power board 48 via an electrical lead and plug 52.

[0041] In use, the article of furniture, whether a chaise 10 as illustrated, or any other similar article of furniture, is provided in a de-mounted or unassembled form. This has the benefit that the article of furniture occupies a reduced volume when being shipped from a manufacturer or from a distributor to a customer. The platform 12 adopts a flat profile due to the attachment mechanisms 22 being positioned as shown in Fig. 2 of the drawings so that the attachment mechanisms lie, effectively, within the plane of the platform 12.

[0042] At the final destination of the chaise 10, the backrest 18 is positioned on, and secured to, the platform 12 followed by the seat base 14. The rods 24 of the attachment mechanisms 22 are pivoted to their upright positions. This is done when the foot portions 36 are not to be attached to the pieces 32 of the rods 24.

[0043] In an embodiment where foot portions 36 are used on the rods 24, the foot portions 36 are fitted prior to mounting the backrest 18 and the seat base 14 so that the platform 12 supports less weight and is easier to lift.

[0044] When it is desired to use the subwoofer 46, the subwoofer 46 is positioned in the part 16 of the platform 12. The armrest 20 is then lowered on to the rods 24, as shown in Fig. 9 of the drawings, to rest on, and be located relative to, the platform 12.

[0045] It is therefore an advantage of the described embodiments, that an article of furniture 10 is provided which lends itself for transportation due to the reduced volume occupied by components of the article of furniture 10. Further, the arrangement of the attachment mechanisms 22 facilitates erection or assembling of the article of furniture 10 by a customer.

[0046] It is a further advantage of the disclosure that an article of furniture 10 is provided which enables access to be gained to a region below one of the rests of the article of furniture, for example, for storage purposes. This is achieved by having the armrest 20 displaceably arranged relative to the platform 12.

[0047] It is yet a further advantage of the disclosure that an article of furniture 10 is provided which lends itself for use with an audio component such as a subwoofer 46.

The construction of the article of furniture 10 renders it a simple procedure to install the subwoofer 46.

[0048] It will be appreciated by persons skilled in the art that numerous variations and/or modifications may be made to the above-described embodiments, without departing from the broad general scope of the present disclosure. The present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive.

CLAIMS:

1. An article of furniture which includes

a platform;

a seat base mounted to the platform to leave at least a part of the platform not covered by the seat base;

at least one rest displaceably mounted relative to the platform to enable access to be gained at least to that part of the platform not covered by the seat base; and

an attaching mechanism carried by the part of the platform for displaceably attaching the at least one rest to the platform, the attaching mechanism comprising at least one supporting element carried by the platform and a co-operating formation carried by the at least one rest, the at least one supporting element comprising a rod fixedly mounted to a rotatable element, the rotatable element being held rotatably captive in the part of the platform and the rod comprising two parts projecting in opposite directions from the rotatable element, a first part of the two parts being longer than a second part of the two parts and the first part co-operating with the co-operating formation of the at least one rest.

2. The article of furniture of claim 1 in which the supporting element is displaceable between a first, storage position and a second, operative position, the co-operating formation interacting with the at least one supporting element to enable the at least one rest to be displaceable relative to the platform.

3. The article of furniture of claim 2 in which the at least one supporting element is pivotally displaceably carried by the platform so that the rest is pivotally displaceable relative to the platform.

4. The article of furniture of claim 3 in which the attaching mechanism comprises a pair of spaced pivoting supporting elements, the supporting elements being independently, pivotally displaceable relative to each other.

5. The article of furniture of claim 4 in which the at least one rest includes a co-operating formation associated with each supporting element.

6. The article of furniture of claim 5 in which each co-operating formation comprises a socket opening out into an operatively bottom surface of the at least one rest.

7. The article of furniture of claim 6 in which each socket is lined with a liner.

8. The article of furniture of any one of the preceding claims in which a foot portion is removably attachable to the second part of the rod.

9. The article of furniture of any one of the preceding claims in which a void is defined within the at least one rest.

10. The article of furniture of claim 9 in which at least the void of the at least one rest is lined with a fire retardant material.

11. A furniture system which includes

an article of furniture as claimed in claim 1, a void being defined within the at least one rest; and

an audio component mounted relative to the part of the platform to be received in the void defined within the at least one rest when the at least one rest is placed in position on the platform.

12. The furniture system of claim 11 in which the platform comprises a frame and the part of the platform is open to a substrate on which the platform rests, the audio component being arranged, in use, on the substrate to protrude through the part of the platform.

13. The furniture system of claim 11 or claim 12 in which the audio component is a speaker assembly.

14. A platform for an article of furniture, the platform including

a body member for supporting components, including at least one rest, of the article of furniture, the body member defining at least a part which is open to a substrate on which the platform is mountable; and

at least one supporting element displaceably carried by the body member, the at least one supporting element comprising a rod fixedly mounted to a rotatable element, the rotatable element being held rotatably captive in the part of the platform and the rod comprising two parts projecting in opposite directions from the rotatable element, a first part of the two parts being longer than a second part of the two parts and the first part co-operating with a co-operating formation of the at least one rest of the article of furniture, the rod being displaceable, via the rotatable element, between a first position in which the parts lie substantially in a plane of the body member and a second, operative position in which the parts extend transversely to the plane of the body member to support the at least one rest of the article of furniture on the platform.

15. The platform of claim 14 which includes at least two supporting elements arranged in spaced relationship on the body member, each of the supporting elements being displaceably carried by the body member.