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(54) **Modular upholstered furniture**

Modulare Polstermöbel

Meuble modulaire rembourré

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## Description

**[0001]** The invention to which this application relates is to improvements to an item of upholstered furniture of the type known as a sofa or sofa bed.

**[0002]** A conventional sofa or sofa bed is typically manufactured from a frame, which is upholstered in a material such as cloth, fabric, leather or the like (hereby referred to by the general reference "material"). This manufacture and assembly occurs at a factory unit and then the completed products are transported, along with a number of the units, to consumers' premises and/or retail outlets in a common geographical area as a vehicle load, by road transport. For large volumes a single goods trailer can be loaded to capacity with said chairs, sofas or sofa beds for delivery to a particular geographical area with the manufacturer waiting until they have sufficient orders for units to fill the trailer to justify the economic cost of sending the trailer to that area. This waiting period can result in delays of days or weeks in the delivery of the items, firstly, because of the time taken to accumulate orders for a given geographical area and secondly, because a vehicle will usually have to visit several locations, which can mean that the vehicle's journey can last for more than one day.

**[0003]** For relatively smaller volumes the sofa or sofa bed can be placed into a goods trailer along with goods from other manufacturers going to the same or similar destinations and when a sufficient load size is reached, the transport occurs. However, again, extensive delays can occur for the same reasons as indicated above in that the logistical organisation and problems which exist are significant.

**[0004]** This means that suppliers are prescriptive with delivery dates to consumers. In other words the supplier nominates the date then seeks the consumers' approval. If the consumer doesn't approve then the supplier endeavours to coerce such approval by saying that they might not be delivering to that area for another, say, four weeks.

**[0005]** The problem with conventional sofas and sofa beds is that due to their nature, the same are relatively bulky and are therefore relatively expensive to transport. This means that in addition to the logistical problems, the price of the sofas and sofa beds can be adversely affected by the cost of transport and in particular with respect to faster transport options such as an overnight delivery service. Such services are nowadays provided by may haulage companies which specialise in delivering bulky items and which does not rely upon the accumulating of sufficient orders to fill an entire wagon with chairs/sofas/sofa beds destined for a particular geographical area. This would reduce delays and provide a better service to the retailer and or consumer.

**[0006]** However due to the size of conventional sofa units, this option is precluded by the very high cost of the option due to the need to transport a bulky item of furniture as a single unit.

**[0007]** A yet further problem with respect to transport can be experienced by the consumer when they purchase a conventional item of furniture from a retail outlet or a manufacturer. The consumer then has the problem of getting the item back to their premises and at the present time they have limited options. They can either hire or borrow a trailer, van or roof rack which is large enough to accommodate the item of furniture or they have to pay for delivery by the supplier. This therefore can add cost to the purchase and can also be frustrating and difficult to arrange for the consumer.

**[0008]** A further problem which is experienced by the consumer who receives the item of furniture such as a sofa or sofa bed is actually getting the item of furniture into their premises in the required location without causing damage to the item, to the premises and/or needing to remove fittings such as doors windows or the like.

**[0009]** Document GB2046088 discloses a modular chair assembly in which a back unit is slidingly engaged in position and attached to the rear of the chair frame. However, due to the sliding nature of engagement, the arms of this chair design are required to slope upwardly to the rear to a height which therefore acts to restrict the possible shapes and designs of the chair. GB2040159 discloses another chair arrangement but in this case the base receives the back and arm units therein to allow engagement and this limits the potential uses of the chair design.

**[0010]** The aim of the present invention is to allow an upholstered sofa or sofa bed to be constructed in a manner which allows the quality of the same to be maintained while allowing the transport of the same in a more economical and prompt manner. A further aim is to ensure that the sofa and/or sofa bed can be transported more easily upon purchase from a retail outlet or a manufacturer and, upon reaching the premises in which the same is to be used can be located in position in the premises without damage and allows the same to be placed in locations which may not be accessible to conventional sofas or sofa beds.

**[0011]** In a first aspect of the invention there is provided an upholstered sofa or sofa bed, said item formed in a modular manner such that at the location of manufacture, the modules comprise at least, a back unit, first and second arm units, a seat platform unit and a front border unit which are produced and formed and are available for transport to a location of use for assembly into the item of furniture and once assembled, the modules are joined together with the back, seat platform and front border units lying between, and joined to, the spaced first and second arm units, using assembly means which are hidden from external view at least on the top and sides of the item when assembled, and wherein the back, seat platform and front border units have internal cavities formed therein and during assembly the back unit, seat platform unit and front border unit are joined to the respective first and second arm units by accessing the internal cavities of the back unit, seat platform unit and

front border unit respectively and engaging the assembly means with the said first or second arm units respectively said back unit formed having an angled upper portion and a lower portion, said upper portion serving as a backrest of the item and positioned above the lower portion and said lower portion having assembly means provided at opposing ends thereof to allow the back unit to be joined directly to the respective first and second arm units and the seat platform unit is connected to the first and second arm units and characterised in that the seat platform unit is selectively provided either as a frame to form the sofa or a foldable bed mechanism to form the sofa bed and the selected seat platform unit is attached at opposing ends to the inner face of the respective arm units.

**[0012]** Typically, all of the assembly means are positioned on and/or accessed from faces of the modular unit which when the item is assembled are positioned inwardly of the item of furniture.

**[0013]** Preferably the assembly means are completely hidden from external viewing once the item is assembled.

**[0014]** In one embodiment, the assembly means are positioned in internal cavities of the item and access to the cavities within the unit in which the assembly means are provided, is via a flap of material, said flap of material movable to an open position to allow access and, once the assembly means are engaged, the material can be moved to a closed position whereupon the flap is retained in that position. In one embodiment, the flap of material is retained in position by hook and loop fastening means.

**[0015]** In one embodiment, a series of assembly means are provided, in one embodiment the assembly means include an aperture which is threaded for the reception of a threaded bolt. Typically a series of said assembly means are spaced at suitable locations on the modular units to allow the joining together of the modular units at the point of use. In one embodiment the assembly means are in the form of a series of blind fittings such as, for example, but not limited to, a rivet T-nut for the reception of a threaded bolt.

**[0016]** In one embodiment, each of the modular units is formed of a frame made from a suitable material such as soft or hard woods, board, chipboard, MDF, OSB or plywood. The frame is in turn upholstered at required locations in fabric, leather, lining cloth, interliner or whatever appropriate material, or combinations of whichever materials are appropriate.

**[0017]** In one embodiment, when the item of furniture is a sofa bed, the folding bed mechanism is provided as a modular unit for transport and can be attached to the remainder of the modular units for the item upon assembly.

**[0018]** When the item of furniture is a sofa, and of the same design as the sofa bed, the item of furniture is provided with a replacement modular unit in the form of a frame which extends between the arms of the sofa and between the back and front of the sofa in a similar manner and position to replace the sofa bed mechanism modular

unit.

**[0019]** In one embodiment a brace is provided to be fitted under the seat platform unit to reduce possible flexing of the seat unit.

5 **[0020]** Typically, the front border, the seat platform and back modular units are each attached at their opposing ends to the left and right hand arm units respectively to assemble the item of furniture.

**[0021]** In addition to the modular units, additional items such as any or any combination of seat cushions, back cushions, scatter cushions, arm caps, glides, feet assembly tools, assembly instructions and the like can be provided as separate items such that, for transport, these items and the modular units can be transported separately and not as an integral sofa/sofa bed. This allows cheaper overnight transport delivery costs of the item such as the units for one sofa or one sofa bed to anywhere in the UK or even abroad by the aforementioned hauliers who specialise in overnight delivering of reasonably sized parcels. Additionally, more prompt delivery from the time of order and reduced assembly costs of the sofa/sofa bed in the manufacturing facility are achieved.

**[0022]** In a further aspect of the invention there is provided a method of manufacturing an upholstered sofa or sofa bed, said method comprising the steps of identifying a series of modular units which are required to form the item, manufacturing at least some of the said units to include a frame and upholstery at a location of manufacture, transporting the modular units to a location for use or retail display and assembling together the modular units at said location to form the item via assembly means which, when the item is formed, are hidden from view, the method including the steps of forming first and second arm units and back, seat platform and front border modular units which have internal cavities formed therein at the time of manufacture and at the time of assembly the back unit, seat platform unit and front border unit are joined to the respective first and second arm units by accessing the internal cavities of the back unit, seat platform unit and front border unit respectively and engaging the assembly means with the said first or second arm units, with the assembly means for connection of the back unit located at the ends of a lower portion of the back unit with an upper portion of the back unit angled and positioned above the lower portion so as to provide the backrest of the item and connecting the arm units, back unit and the seat platform unit and characterised in that the seat platform unit which is provided to the location of assembly is selected to be either a frame to allow a sofa to be assembled or a foldable bed mechanism to allow a sofa bed to be assembled, and attaching said seat platform unit at opposing ends to an inner face of the respective arm units.

**[0023]** The inventor has realised that by manufacture of modular units, whereby each modular unit when packaged would constitute a reasonably sized parcel, then the units for the item of furniture can be transported in a format at a cost which is commercially viable by any one

of the many haulage companies which nowadays offer overnight delivery services for reasonably sized parcels. The modular units can then be assembled into the item at the place of the intended use of the item.

**[0024]** A major advantage of being able to despatch modular furniture using overnight delivery services is that once the ordered item has been manufactured the consumer can nominate their preferred delivery date and the supplier can action this by simply despatching on the prior day.

**[0025]** This is undoubtedly a major plus point for the consumer and allows the supplier to achieve service levels hitherto unachievable. The current invention allows this to be achieved as the modular units are of an acceptable size for transport using these services.

**[0026]** Specific embodiments of the invention are now described with reference to the accompanying drawings:-

Figure 1 illustrates a back module for an item of furniture in accordance with an embodiment of the invention;

Figure 2 illustrates a seat platform for use in conjunction with the module of Figure 1;

Figure 3 illustrates one of the arm module units for use in conjunction with Figures 1 and 2;

Figure 4 illustrates a front border modular unit for use in conjunction with the units of Figures 1 to 3; and

Figures 5a - d illustrate the assembly of the units of Figures 1 to 4 to form the finished item.

**[0027]** Referring firstly to Figures 1 to 4, there are illustrated the required modular units for the construction and assembly, at the place for use, of a sofa. It should be appreciated that two of the modular arm units of Figure 3 will be provided, one for each end of the sofa. The modular units comprise a back unit 2 as shown in Figure 1, said back unit comprising a frame of suitable material or materials selected from, for example, particle board, chipboard, plywood, MDF, OSB and/or soft and hard woods. It is found in this particular example, that plywood material has the strength and size characteristics which are beneficial for manufacture of the components in which the locating apertures are drilled. The back unit is formed having an angled upper portion 4 which serves as a backrest of the sofa and a lower portion 6 in which assembly means 8, 10 are provided in the form of apertures through which threaded bolts can be passed in the direction indicated by arrow 12. Typically, the unit is upholstered in fabric or leather, with that part of the unit which is to be exposed externally, when the sofa/sofa bed is assembled, typically being upholstered in a higher grade of material than the remainder of the unit.

**[0028]** Figure 2 illustrates the seat platform modular

unit 14 which, in this embodiment, is comprised of a rectangular frame of, but not limited to, plywood, chipboard particle board, MDF, OSB, softwood or hardwood material with assembly means in the form of apertures 16 provided at each end thereof, again for the subsequent passage of threaded bolts therethrough in the direction indicated by arrows 20. It should be noted that if a sofa bed is to be subsequently assembled rather than a sofa, then the seat platform unit 14 will not be provided and is replaced by a folding bed mechanism modular unit in a folded position which will be attached, perhaps using different assembly apertures, but in the same manner, as will now be described.

**[0029]** Figure 4 illustrates a front border unit 22 which is in the form of a rectangular frame, upholstered in a suitable material and again has assembly means apertures 24 at each end thereof.

**[0030]** Figure 3 illustrates one of the arm modular units 18 which has an outer face 26, top face 28, front face 30 and inner face 32. The arm unit is formed of a plywood/chipboard/particle board/MDF/OSB/softwood/hardwood frame upholstered with fabric and/or leather and on the inner face 32, a range of assembly means 34 is provided at selected locations. In one embodiment, only the assembly means for a particular item of furniture will be formed, or alternatively, a number of assembly means are provided, not all of which may be required to be used for a particular furniture item assembly so that, for example, assembly means can be provided for the assembly of a folding bed mechanism, and apertures can be provided for a seat platform unit 14 with the use of the seat platform unit or folding bed mechanism unit dependent on whether the item of furniture is to be a sofa or a sofa bed. In any case, it is preferred that the assembly means include a blind fixing system such as but not limited to a rivet T-nut. This allows threaded apertures to be provided into which bolts, having passed through an aperture in the back unit, seat platform or front border unit, can be tightened to join the units together. It will therefore be appreciated that in each case the attachment of the units to the arm units at each end, is achieved from "inside" a cavity in one of the units of the sofa such that the same are not viewable externally, once the sofa has been assembled.

**[0031]** Figures 5a to d illustrate the assembly of a sofa using the components of Figures 1 to 4 and in accordance with the invention. Each of the modular units is constructed and upholstered in the factory. The modular units are then packaged separately, or in certain combinations of units and are transported either direct to the consumers' premises or to a retail outlet. When the modular units, which will also include items such as cushions, scatters, arm caps, feet and the like, reach their final destination the recipient can take the relatively simple steps of assembling the item of furniture.

**[0032]** Figure 5a illustrates two arm units 18 and a back unit 2 in position awaiting assembly.

**[0033]** With reference now to all of the drawings, to

form the sofa once delivered to the premises for use, the back unit is moved to a substantially vertical position, as shown in Figure 5b, and assembly bolts are inserted through the apertures 8 and 10 at each end of the back unit, by lifting a flap or portion of material 33 at the bottom portion of the back unit allowing access to be gained to the cavity within the frame. Threaded bolts are then inserted to pass through the apertures 8, 10, in the direction of arrows 12 in Figure 1, so that the bolts will enter the threaded apertures 34 of Figure 3 at the rear of the arm unit internal face.

**[0034]** With these bolts inserted and tightened in position, the back unit is held in position with the arm modular units as illustrated in Figure 5b and then the seat platform unit 14 of Figure 2 can be moved into position. In this case as the seat platform unit has no material on the underside of the same access can be directly gained into the cavity in that unit frame for bolts to be passed through the aperture 16 in the direction of arrows 20 in Figure 2 with the threaded bolts being received in the apertures 34 suitably positioned on the internal face 32 of each of the arm units. Thus, the back unit and seat platform unit are now located with respect to the arms. Figure 5c illustrates how the front border unit 22 can be moved into position and retained by passing threaded bolts from the inside cavity of the unit 22, again by removing a flap of fabric on the inner side, and into the threaded apertures 34". In addition items such as seat cushions 38, back cushions 40 and scatter cushions 42 can be provided so the sofa is completely assembled. In each case once the appropriate assembly means bolts have been inserted any flaps of material can be moved to a closed position so as to mask the cavity and the flaps can then be retained in that position.

**[0035]** The ability to provide the sofa or sofa bed in a modular form rather than the conventional integral form means that several advantages are obtained.

**[0036]** Firstly the manufacturing stages of the item at the factory unit are reduced thereby saving time of construction at the factory for each sofa.

**[0037]** Secondly, the provision of the sofa or sofa bed in a kit of modular units considerably improves the transport opportunities without affecting the quality of the product. For example, the transport of the chair, sofa or sofa bed by an overnight delivery service is possible as each unit is transported as an entity rather than the whole item as one unit and the cost is significantly reduced thereby making the use of this form of delivery service to be a commercial reality for manufacturers. Furthermore the use of overnight delivery services such as many hauliers provide nowadays for reasonably sized parcels permits the economical and prompt delivering of single sofas/sofa beds in a modular format to anywhere in the UK or even abroad. This is in stark contrast to the current means of distributing conventional sofas/sofa beds where distribution cannot take place until a sufficient number of sofas/sofa beds is required in a given geographical area to make sending a wagon to that area commercially viable.

This, in turn, means that the manufacturer can provide the delivery of single sofas or sofa beds extremely quickly after the order has been made and makes the possibility of direct mail or internet ordering of the goods in question by consumers economically viable.

**[0038]** Thirdly, the provision of the items of upholstered furniture in a kit form means that the same can be provided for storage at a retail outlet and then provided to consumers for transport to home in the kit form in their own cars without the consumer necessarily having to pay for transport by third parties or arrange and pay for the hire of vehicles or trailers.

**[0039]** Fourthly a yet further advantage is that as the sofas or sofa beds can be provided in a kit form the same can be transported into areas of a premises which may not be accessible for a conventional upholstered item, such as for example into attic spaces. Indeed a further advantage is that the modular units can be manoeuvred and/or delivered by potentially one person rather than the two persons who are normally required to lift and carry conventional upholstered items of furniture. Furthermore due to the assembly as described herein, when assembled the onlooker cannot view the assembly means as they are all hidden from view either by material, by other components of the item or because they are located on the underside of the item.

## Claims

1. An upholstered sofa or sofa bed, said item formed in a modular manner such that at the location of manufacture, the modules comprise at least, a back unit (2), first and second arm units (18), a seat platform unit (14) and a front border unit (22) which are produced and formed and are available for transport to a location of use for assembly into the item of furniture and once assembled, the modules are joined together with the back, seat platform and front border units lying between, and joined to, the spaced first and second arm units, using assembly means (8,10,16,24,34) which are hidden from external view at least on the top and sides of the item when assembled, and wherein the back, seat platform and front border units have internal cavities formed therein and during assembly the back unit, seat platform unit and front border unit are joined directly to the respective first and second arm units by accessing the internal cavities of the back unit, seat platform unit and front border unit respectively and engaging the assembly means with the said first or second arm units respectively, said back unit (2) formed having an angled upper portion (4) and lower portion (6), said upper portion serving as a backrest of the item and positioned above the lower portion and said lower portion having assembly means (8, 10) provided at opposing ends thereof to allow the back unit to be joined directly to the respective first and second arm

- units (18), wherein the seat platform unit (14) is connected to the first and second arm units (18) and **characterised in that** the seat platform unit (14) is selectively provided either as a frame to form the sofa, or as a foldable bed mechanism to form the sofa bed, and that the selected seat platform unit is attached at opposing ends to the inner face (32) of the respective arm units (18).
2. An item according to claim 1 wherein access to engage the assembly means is from faces positioned inwardly of the item of furniture once formed.
  3. An item according to claim 2 wherein access to engage the assembly means is via an internal cavity within one of the modular units being jointed together.
  4. An item according to claim 3 wherein access is gained via a flap of material movable to an open position and, once the assembly means are engaged, the material is moved to a closed position whereupon the flap is retained in that position.
  5. An item according to claim 1 wherein the assembly means include an aperture in a first modular unit which is threaded for the reception of a threaded bolt which passes through an aperture in a second modular unit to join the same together, and a series of said assembly means are spaced at suitable locations on the modular units to allow the assembly together at the point of use.
  6. An item according to claim 5 wherein the assembly means threaded apertures are in the form of a series of blind fittings for the reception of a threaded bolt.
  7. An item according to claim 1 wherein each of the modular units comprises a frame and at least one face of the said frame is upholstered.
  8. An item according to any of the preceding claims wherein additional items for use in conjunction with the item of furniture can be transported with but separately to the modular units.
  9. A method of manufacturing an upholstered sofa or sofa bed, said method comprising the steps of identifying a series of modular units which are required to form the item, manufacturing at least some of said units to include a frame and upholstery at a location of manufacture, transporting the modular units to a location for use or retail display and assembling together the modular units at said location to form the item via assembly means (8,10,16,24,34) which, when the item is formed, are hidden from view, the method including the steps of providing first and second arm units (18) and back (2), seat platform (14)

and front border (22) modular units which have internal cavities formed therein at the time of manufacture and at the time of assembly the back unit, seat platform unit and front border unit are joined to the respective first and second arm units and accessing the internal cavities of the back unit, seat platform unit and front border unit respectively and engaging the assembly means with the said first or second arm units, with the assembly means (8, 10) for connection of the back unit located at the ends of a lower portion (6) of the back unit (2), with an upper portion (4) of the back unit angled and positioned above the lower portion so as to provide the backrest of the item and connecting the arm units, back unit and the seat platform unit and **characterised in that** the seat platform unit which is provided to the location of assembly is either a frame to allow a sofa to be assembled or a foldable bed mechanism to allow a sofa bed to be assembled, and attaching said seat platform unit at opposing ends to an inner face (32) of the respective arm units.

10. A method according to claim 9 wherein additional items for use in conjunction with the item of furniture are transported for use with the item when formed.

#### Patentansprüche

1. Ein gepolstertes Sofa oder Sofabett, wobei besagtes Teil auf eine modulare Weise so am Herstellungsort zusammengebaut wird, dass die Module wenigstens aus einem Rückenteil (2), ersten und zweiten Armeinheiten (18), einer Sitzplattformeinheit (14) und einer vorderen Blendeneinheit (22) bestehen, die hergestellt und gebildet werden und zum Transport an einen Verwendungsort zum Zusammenbau in ein Möbelstück verfügbar sind und wenn zusammengebaut, die Module mit dem Rückenteil, der Sitzplattform zusammengefügt werden und die vorderen Blendeinheiten zwischen den im Abstand angeordneten ersten und zweiten Armeinheiten liegen und mit Befestigungsmitteln (8,10,16,24,34) zusammengefügt werden, die von externer Sicht verdeckt sind, wenigstens oben und an den Seiten des Teils, wenn zusammengebaut, und in dem das Rückenteil, Sitzplattform und vorderen Blendeinheiten interne darin geformte Hohlräume aufweisen und beim Zusammenbau die Rückenteileinheit, Sitzplattformeinheit und vordere Blende direkt an die entsprechende erste und zweite Armeinheit durch die internen Hohlräume der Rückenteileinheit, Sitzplattformeinheit bzw. vorderen Blendeinheit zusammengefügt werden und die Befestigungsmittel in die besagte erste bzw. zweite Armeinheit eingreifen, besagte Rückenteileinheit (2) mit einem oberen abgewinkelten Teil (4) gebildet ist und einem unteren Teil (6), besagtes oberes Teil als Rückenlehne des Teils

- dient und über dem unteren Teil angeordnet ist und besagtes unteres Teil Befestigungsmittel (8, 19) an gegenüberliegenden Enden derselben aufweist, so dass die Rückeneinheit direkt an der ersten bzw. zweiten Armeinheit (18) befestigt werden kann, indem die Sitzplattform (14) an der ersten und zweiten Armeinheit (18) befestigt wird, **dadurch gekennzeichnet, dass** die Sitzplattform (14) wahlweise entweder als ein Rahmen verfügbar gemacht wird, um das Sofa zu bilden oder als ein klappbarer Bettmechanismus, um das Sofabett zu bilden und dass die selektierte Sitzplattform an gegenüberliegenden Enden der Innenseite (32) der entsprechenden Armeinheiten (18) befestigt ist.
2. Ein Teil nach Anspruch 1, in dem Zugang zum Eingriff der Befestigungsmittel von Seiten ermöglicht wird, die zur Innenseite des Möbelstücks nach innen angeordnet sind, wenn dasselbe zusammengebaut ist.
  3. Ein Teil nach Anspruch 2, in dem Zugang zum Eingriff der Befestigungsmittel durch einen internen Hohlraum in einer der modularen Einheiten ermöglicht wird, die zusammengebaut wird.
  4. Ein Teil nach Anspruch 3, in dem Zugang über eine Stoffflasche ermöglicht wird, die in eine offene Position bewegt werden kann, und nachdem die Befestigungsmittel eingegriffen haben, der Stoff in eine geschlossene Position bewegt wird und daraufhin die Lasche in dieser Position gehalten wird.
  5. Ein Teil nach Anspruch 1, in dem die Befestigungsmittel eine Öffnung in der ersten modularen Einheit enthält, die ein Gewinde für die Aufnahme eines Gewindebolzens aufweist, der durch eine Öffnung in einer zweiten modularen Einheit geführt wird, um dieselben zusammenzufügen und eine Reihe der besagten Befestigungsmittel an geeigneten Stellen an den modularen Einheiten angeordnet sind, um den Zusammenbau am Verwendungsort zu ermöglichen.
  6. Ein Teil nach Anspruch 5, in dem die Befestigungsmittel mit Gewinde versehenen Öffnungen in der Form von verdeckten Öffnungen für die Aufnahme eines Gewindebolzens sind.
  7. Ein Teil nach Anspruch 1, in dem jede der modularen Einheiten einen Rahmen aufweist und wenigstens eine Seite des besagten Rahmens gepolstert ist.
  8. Ein Teil nach einem beliebigen der vorherigen Ansprüche, in dem zusätzliche Teile zur Verwendung zusammen mit dem Möbelstück transportiert werden können, aber separat von den modularen Einheiten.
  9. Eine Herstellungsmethode für ein gepolstertes Sofa oder Sofabett, wobei besagte Methode Schritte zur Identifizierung einer Reihe von modularen Einheiten aufweist, die notwendig sind, das Teil zusammenzufügen, wenigstens einige der besagten Einheiten einen Rahmen und Polster enthalten, die an einem Herstellungs-ort gefertigt werden, die modularen Einheiten nach einem Ort zur Verwendung oder Einzelhandelsausstellung transportiert werden und die modularen Einheiten an besagtem Ort mit Hilfe von Befestigungsmitteln (8, 10, 16, 24, 34) zu dem Teil zusammenzufügen, welche, wenn es zusammengebaut ist, verdeckt sind, die Methode Schritte aufweist, die die erste und zweite Armeinheit (18) und Rückenteil (2), Sitzplattform (14) und vordere Blendeneinheiten (22) verfügbar macht, die darin während zur Zeit der Herstellung gebildete interne Hohlräume aufweisen und zur Zeit des Zusammenbaus die Rückeneinheit, Sitzplattform und vordere Blendeneinheit mit der entsprechenden ersten und zweiten Armeinheiten zusammengefügt werden und durch die internen Hohlräume der Rückeneinheit, Sitzplattform bzw. vorderen Blendeneinheit den Eingriff der Befestigungsmittel in die besagte erste oder zweite Armeinheit ermöglichen, wobei die Befestigungsmittel (8, 10) zur Verbindung der Rückeneinheit sich an den Enden des unteren Teils (6) der Rückeneinheit (2) befinden und der obere Teil (4) der Rückeneinheit abgewinkelt ist und sich über dem unteren Teil befindet, um die Rückenlehne des Teil zu bilden und die Armeinheiten, Rückeneinheit und die Sitzplattformeneinheit mit einander zu verbinden, **dadurch gekennzeichnet, dass** die Sitzplattformeneinheit, die an dem Zusammenbauort entweder als ein Rahmen bereitgestellt wird, so dass ein Sofa zusammengefügt werden kann oder als ein klappbarer Bettmechanismus, so dass ein Sofabett zusammengefügt werden kann und besagte Sitzplattform an gegenüberliegenden Enden an einer Innenseite (32) der entsprechenden Armeinheiten befestigt wird.
  10. Eine Methode nach Anspruch 9, in der zusätzliche Teile (zur Verwendung mit dem Möbelstück) zur Verwendung mit dem Teil, wenn zusammengefügt, transportiert werden.

#### Revendications

1. Canapé ou canapé convertible rembourré, ledit article étant formé de manière modulaire de sorte que, au point de fabrication, les module comprenant au moins une unité formant dossier (2), une première et une seconde unités formant accoudoirs (18), une unité formant plateforme pour le siège (14) et une unité formant traverse antérieure (22), qui sont produites et formées, et qui sont disponibles pour être

- transportées jusqu'à un lieu d'utilisation et assemblées pour obtenir le meuble souhaité et, une fois assemblés, les modules sont joints ensemble, l'unité formant dossier, l'unité formant plateforme pour le siège et l'unité formant traverse sont placées entre les première et seconde unités formant des accoudoirs écartés l'un de l'autre et jointes à ceux-ci par des moyens d'assemblage (8,10,16,24,34) qui sont invisibles de l'extérieur, au moins sur le haut et les côtés de l'article après son assemblage, et dans lequel les unités formant le dossier, la plateforme pour le siège et la traverse antérieures sont dotées de cavités formées à l'intérieur de ces unités et, pendant l'assemblage, les unités formant le dossier, la plateforme pour le siège et la traverse antérieure sont directement jointes aux premier et second accoudoirs respectifs en accédant respectivement aux cavités intérieures du dossier, de la plateforme pour le siège et de la traverse antérieure et en engageant respectivement des moyens d'assemblage avec les dites première et seconde unité formant accoudoirs, ledit dossier (2) étant formé de sorte à présenter une partie supérieure inclinée (4) et une partie inférieure (6), ladite partie supérieure servant de dossier à l'article et étant placée au-dessus de la partie inférieure, et ladite partie inférieure ayant des moyens d'assemblage (8, 10) prévus à des extrémités opposées de cette partie, ce qui permet de joindre directement et respectivement le dossier aux première et seconde unités formant accoudoirs (18), dans lequel l'unité formant plateforme pour le siège (14) est raccordée aux première et seconde unités formant accoudoirs (18), et **caractérisé en ce que** l'unité formant plateforme pour le siège (14) est fournie au choix soit comme un bâti qui forme le canapé, soit comme un mécanisme qui forme un lit repliable pour former le canapé convertible, et **en ce que** la plateforme sélectionnée pour le siège est attachée, à des extrémités opposées, à la face intérieure (32) des accoudoirs respectifs (18).
2. Article selon la revendication 1, dans lequel l'accès pour l'engagement des moyens d'assemblage s'effectue à partir de faces disposées vers l'intérieur du meuble après sa formation.
  3. Article selon la revendication 2, dans lequel l'accès pour l'engagement des moyens d'assemblage s'effectue par l'intermédiaire d'une cavité intérieure située dans l'une des unités modulaires en cours d'assemblage.
  4. Article selon la revendication 3, dans lequel l'accès s'effectue par l'intermédiaire d'un panneau de tissu qui peut être déplacé jusqu'à une position d'ouverture ; une fois les moyens d'assemblage engagés, le tissu est ramené jusqu'à une position de fermeture, après quoi il est maintenu dans cette position.
  5. Article selon la revendication 1, dans lequel les moyens d'assemblage comprennent une ouverture, dans une première unité modulaire, qui est filetée pour recevoir un boulon fileté qui traverse une ouverture dans une seconde unité modulaire pour réunir ces deux unités, et une série desdits moyens d'assemblage sont espacés en des endroits appropriés sur les unités modulaires pour permettre leur assemblage au point d'utilisation.
  6. Article selon la revendication 5, dans lequel les ouvertures filetées des moyens d'assemblage sont en forme d'une série de trous borgnes pour la réception d'un boulon fileté.
  7. Article selon la revendication 1, dans lequel chacune des unités modulaires comprend un bâti et au moins une face dudit bâti est rembourrée.
  8. Article selon l'une quelconque des revendications précédentes, dans lequel des articles supplémentaires à utiliser conjointement avec le meuble peuvent être transportés avec les unités modulaires, mais sans être attachés à celles-ci.
  9. Procédé de fabrication d'un canapé ou d'un canapé convertible, ledit procédé comprenant les étapes qui consistent à identifier une série d'unités modulaires qui sont requises pour former l'article, à fabriquer au moins certaines de ces unités dans un lieu de fabrication pour inclure un bâti et un rembourrage, à transporter les unités modulaires jusqu'à un lieu d'utilisation ou de vente au détail, et à assembler les unités modulaires en ce dit lieu pour former l'article avec des moyens d'assemblage (8,10,16,24,34) qui, une fois l'article assemblé, sont invisibles de l'extérieur, le procédé comprenant les étapes qui consistent à fournir une première et une seconde unités formant accoudoirs (18), ainsi que des unités modulaires formant un dossier (2), une plateforme pour le siège (14) et une traverse antérieure (22), qui présentent des cavités intérieures formées pendant la fabrication et, au moment de l'assemblage, à joindre aux première et seconde unités formant les accoudoirs respectifs les unités formant le dossier, le siège et la traverse antérieure, à accéder respectivement aux cavités intérieures du dossier, de la plateforme formant siège et de la traverse antérieure, et à engager les moyens d'assemblage avec les unités formant lesdits premier ou second accoudoirs, avec les moyens d'assemblage (8, 10) pour le raccordement de l'unité formant dossier (2), une partie supérieure (4) du dossier étant inclinée et placée au-dessus de la partie inférieure de sorte à créer le dossier de l'article, et à raccorder les unités formant les accoudoirs, le dossier et la plateforme pour le siège, et **caracté-**

**risé en ce que** l'unité formant plateforme pour le siège qui est fournie au point d'assemblage est soit un bâti pour permettre d'assembler un canapé, soit un mécanisme à lit repliable permettant d'assembler un canapé convertible, et à attacher, à des extrémités opposées, ladite unité formant plateforme pour le siège à une face intérieure (32) des accoudoirs respectifs.

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10. Procédé selon la revendication 9, selon lequel des articles supplémentaires, à utiliser conjointement avec le meuble, sont transportés pour équiper l'article une fois formé.

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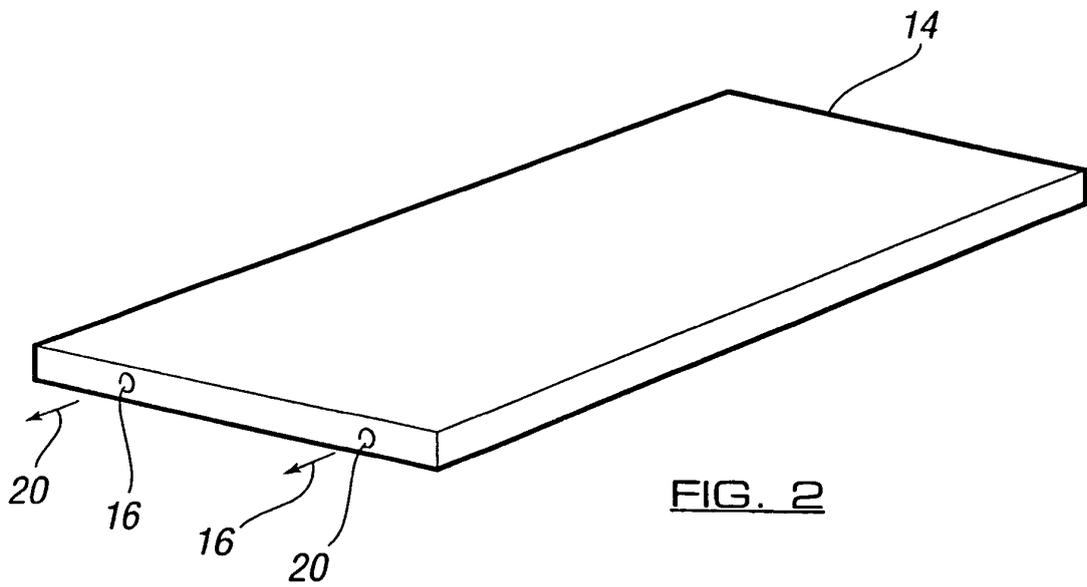
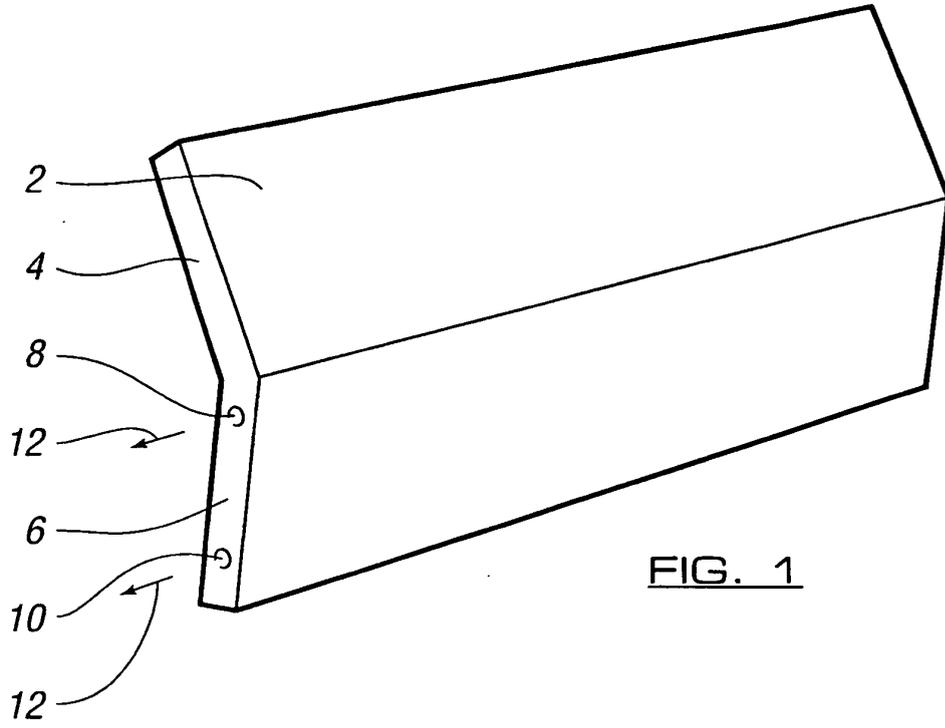
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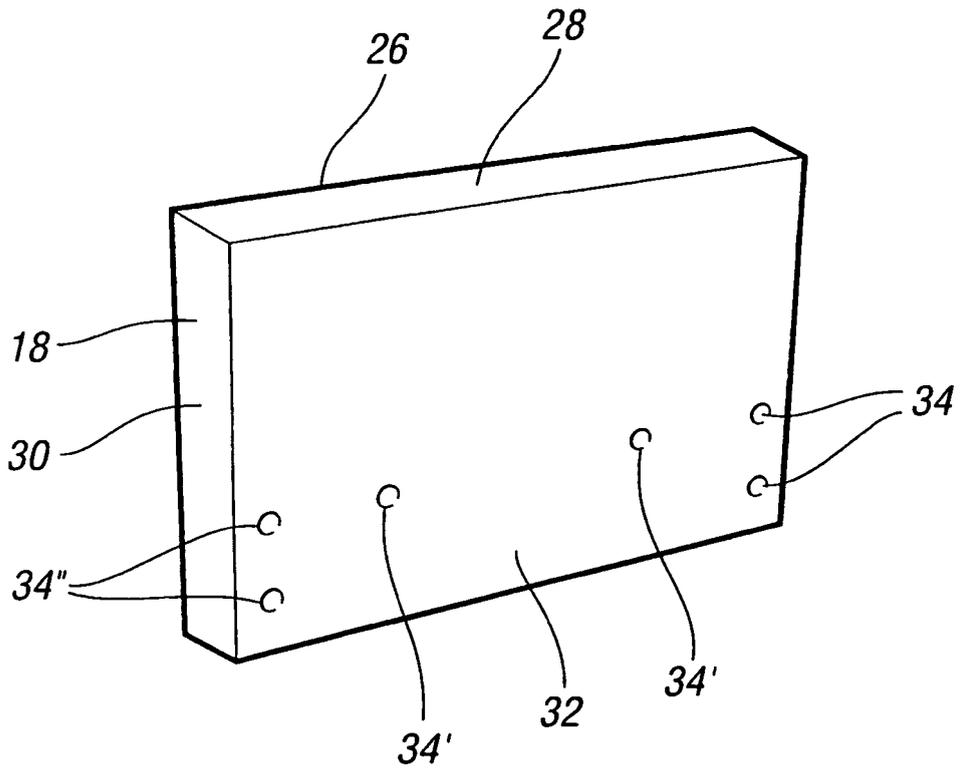


FIG. 3

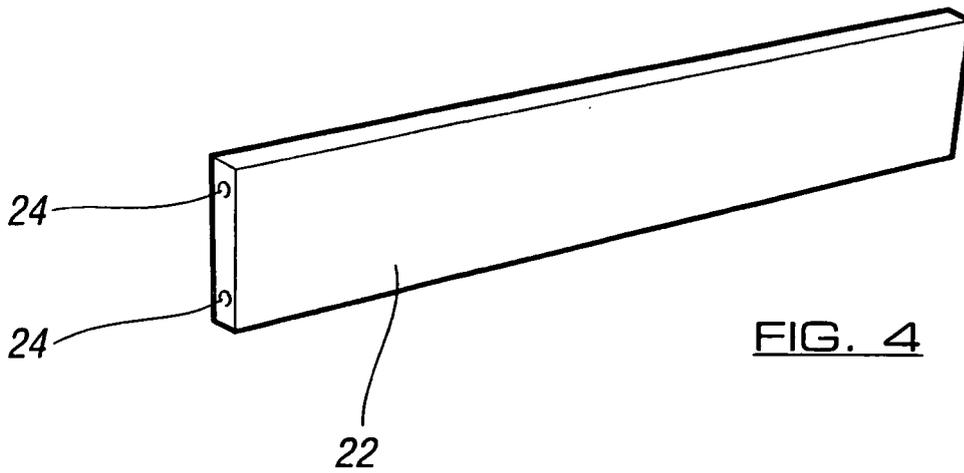
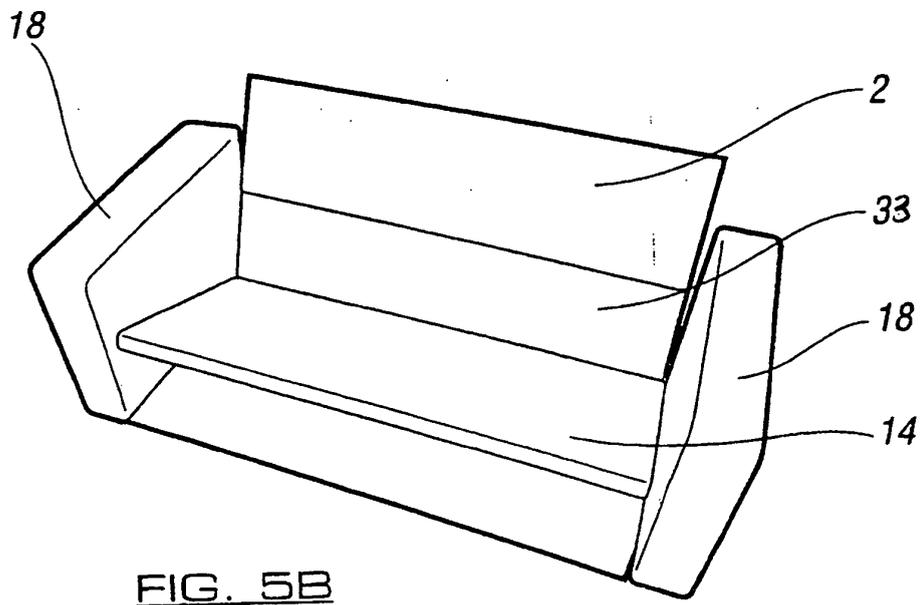
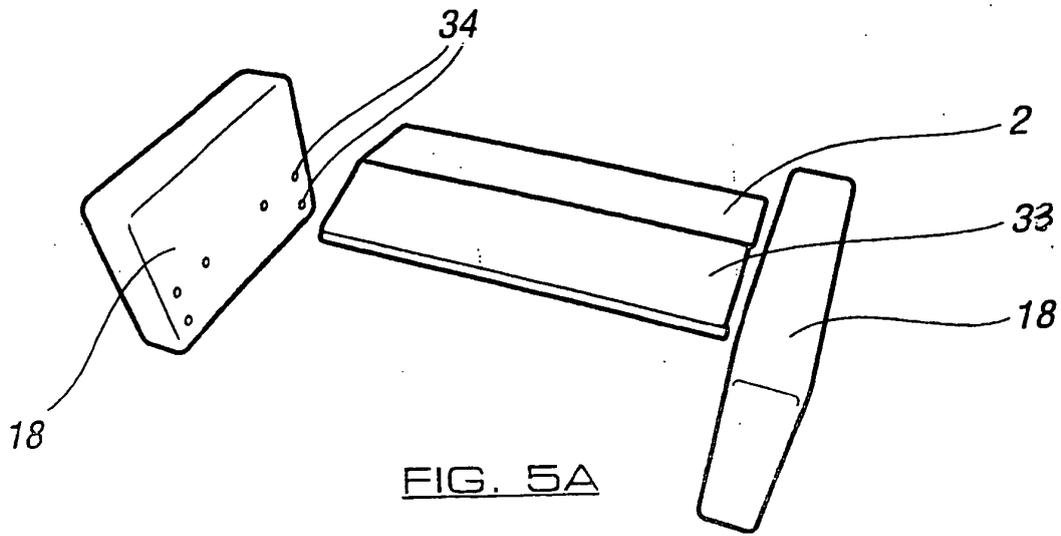
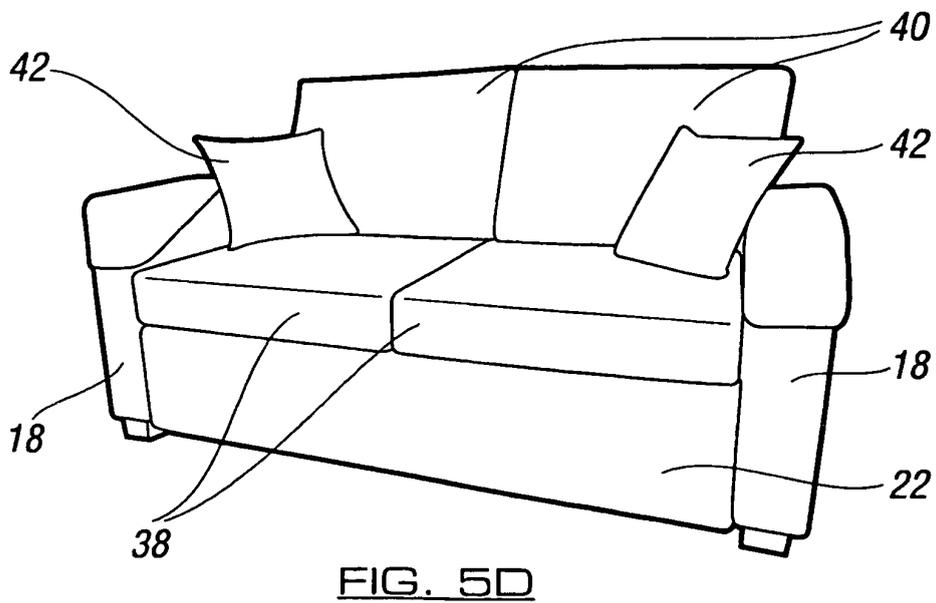
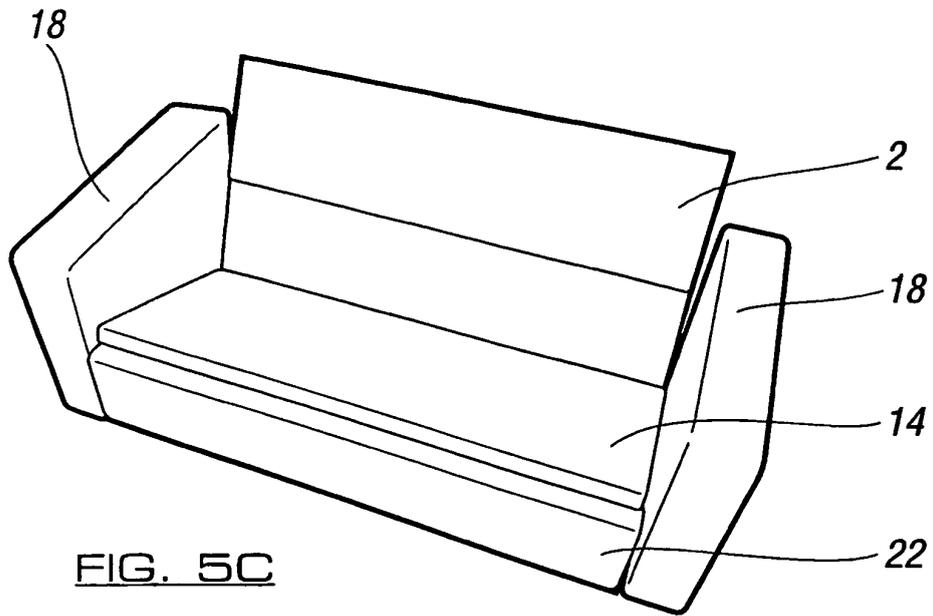


FIG. 4





**REFERENCES CITED IN THE DESCRIPTION**

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