



US 20050146178A1

(19) **United States**(12) **Patent Application Publication**
Hergesell et al.(10) **Pub. No.: US 2005/0146178 A1**(43) **Pub. Date: Jul. 7, 2005**(54) **COMPONENT FOR A STACKABLE CHAIR**(52) **U.S. Cl. 297/239**(75) **Inventors: Harald Hergesell, Goerwihl (DE); Udo
Hasenbein, Haan (DE)**

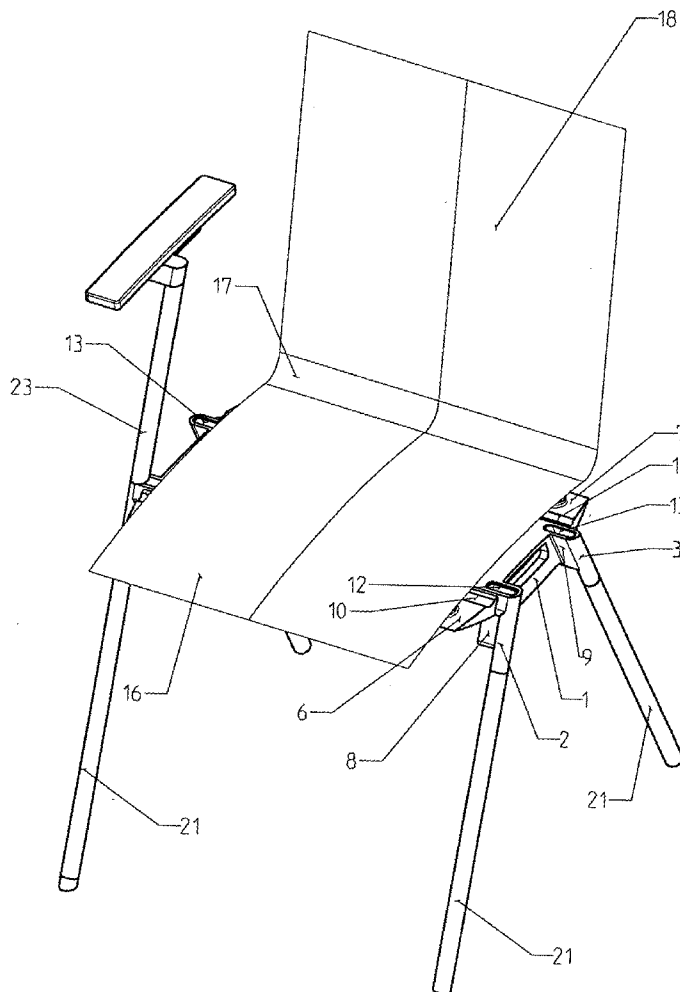
Correspondence Address:

**OBLON, SPIVAK, MCCLELLAND, MAIER &
NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314 (US)**(73) **Assignee: SEDUS STOLL AG, Waldshut-Tiengen
(DE)**(21) **Appl. No.: 10/619,523**(22) **Filed: Jul. 16, 2003**(30) **Foreign Application Priority Data**

Sep. 2, 2002 (EP) 02 019 591.3

Publication Classification(51) **Int. Cl.⁷ A47C 3/04**(57) **ABSTRACT**

A component for a stackable chair comprises a cuboidal basic body (1) which has two leg stubs (2, 3) on one longitudinal side and two crossmember stubs (4, 5) on its other longitudinal side. The two ends (6, 7) of the basic body (1) are bevelled in the forward and rearward directions at the sides, and noses (8, 9) which run parallel to the leg stubs (2, 3) are provided on the underside of the basic body (1), and channels (10, 11) are provided above the noses (8, 9), on the top side. The chair comprises two identical components of this type. If such a chair is stacked vertically on another, identical chair, then the bevelled ends (6, 7) of the basic body (1) have a centring effect and bring the chair into the correct position, with the result that the noses (8, 9) on the chair stubs (2, 3) enter into the channels (10, 11) on the top side of the basic body of the lower chair.



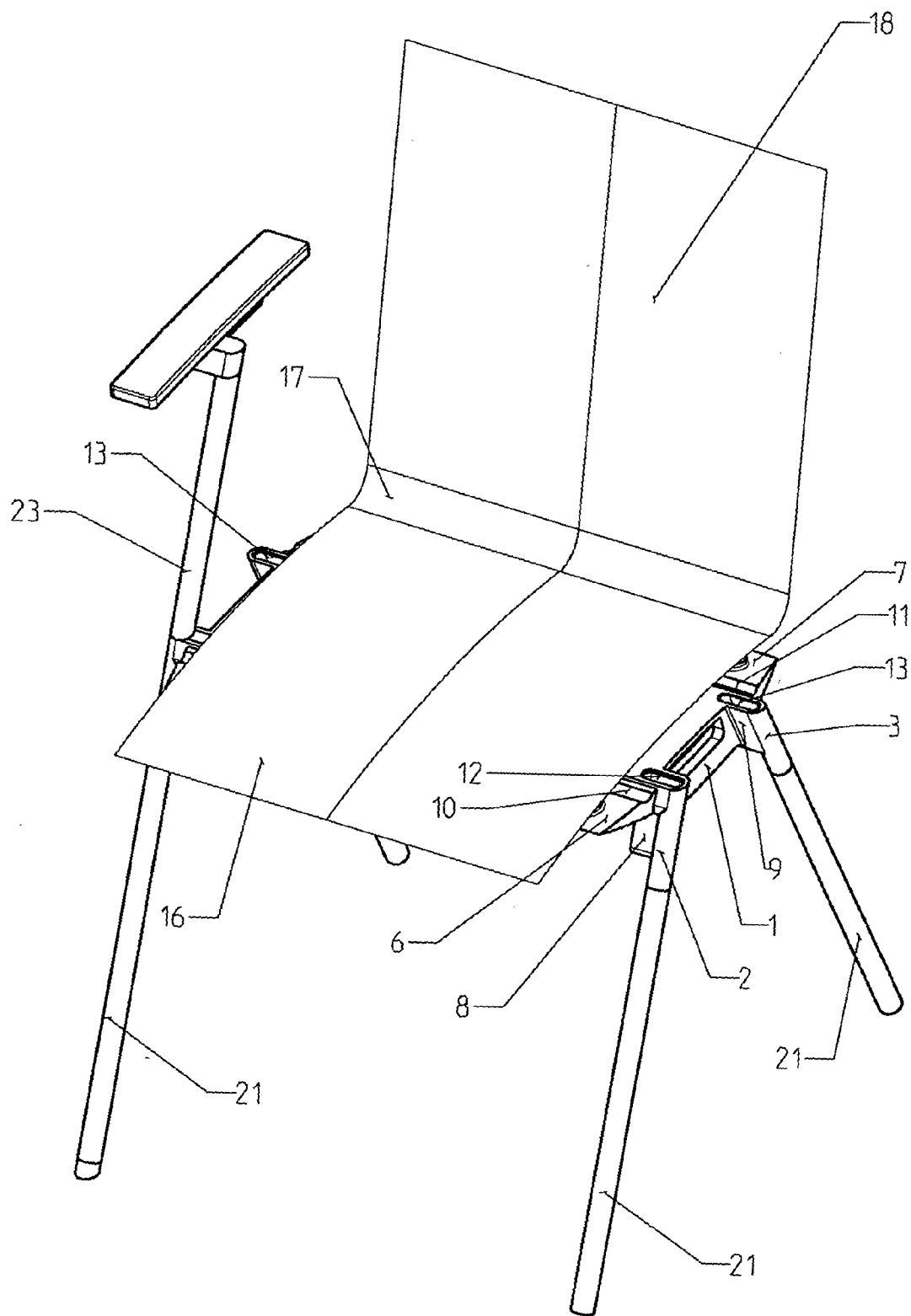


Fig.1

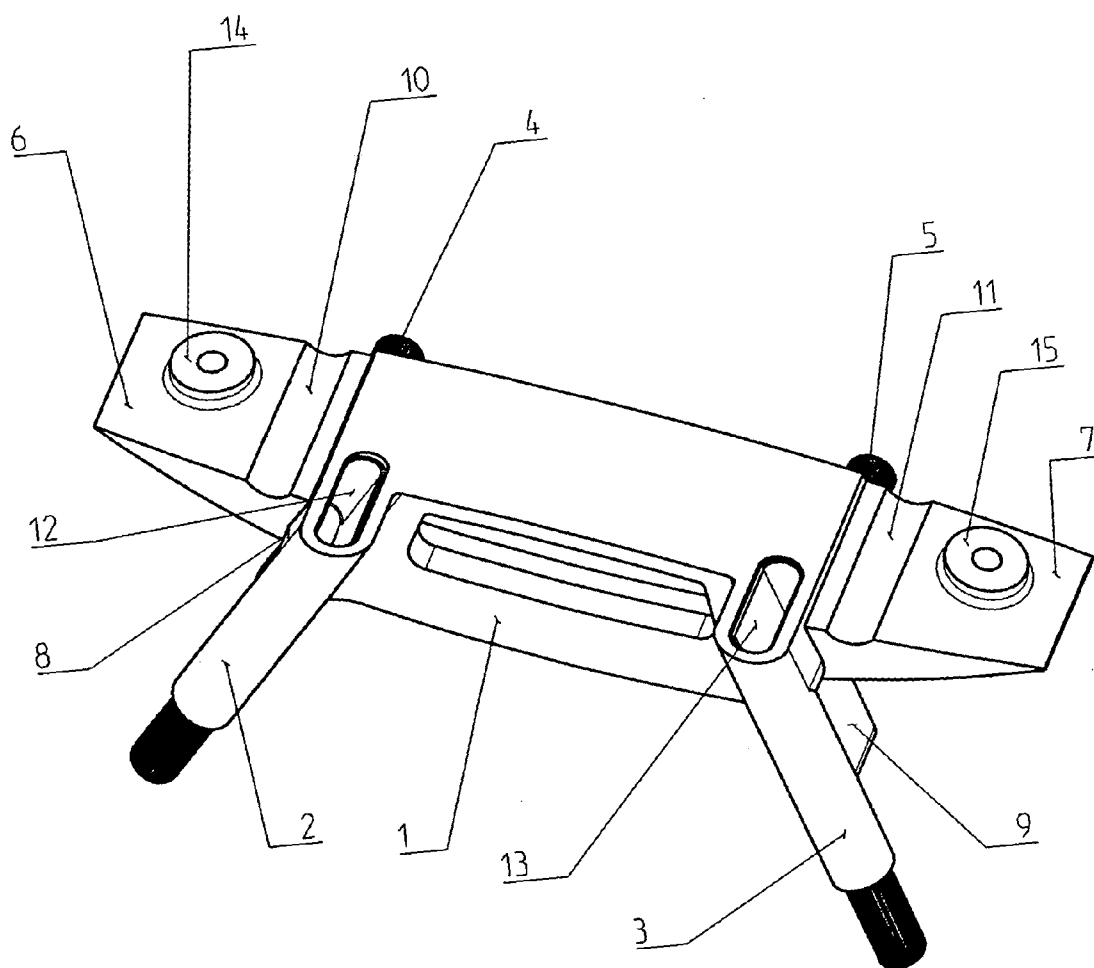


Fig.2

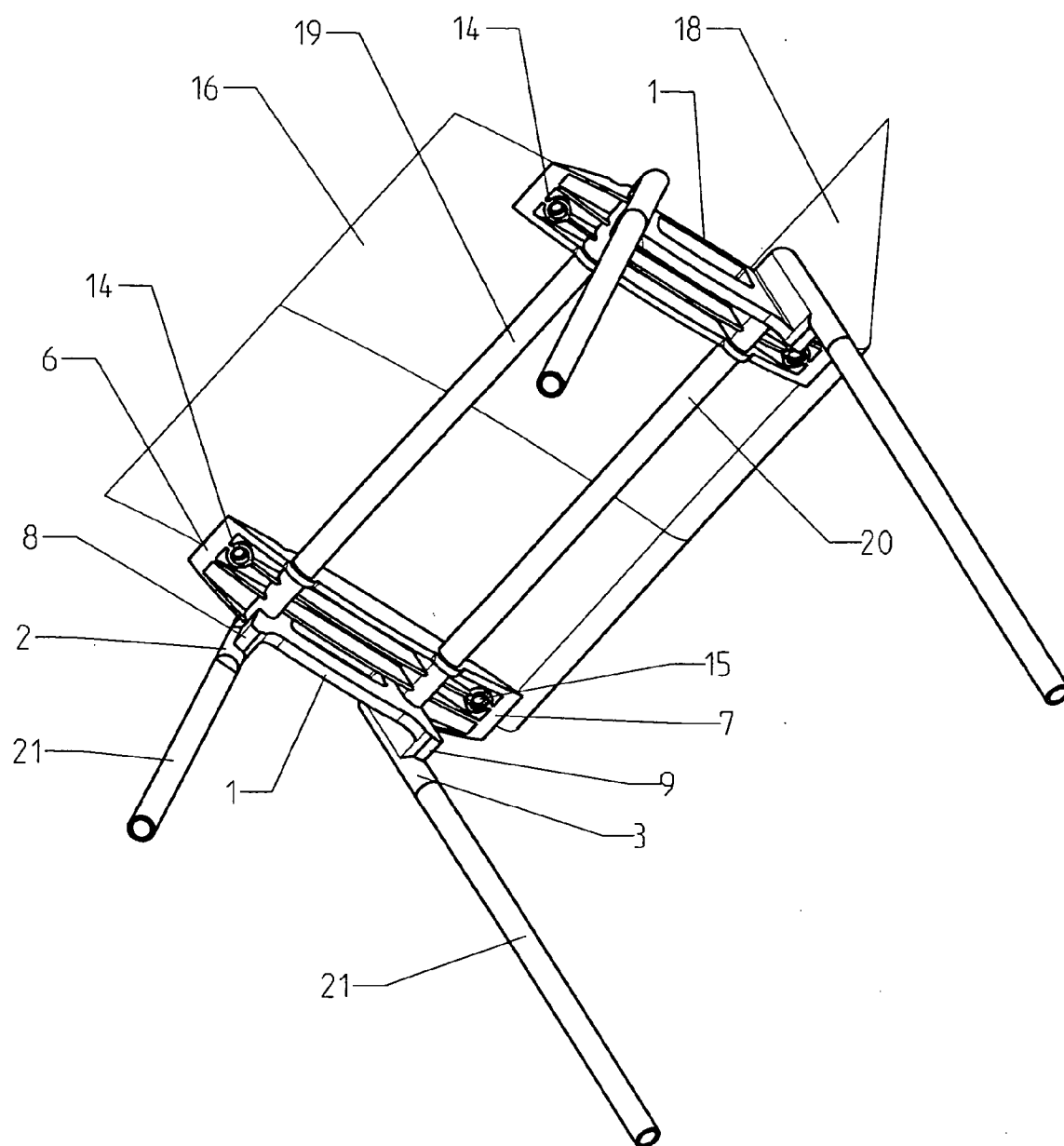
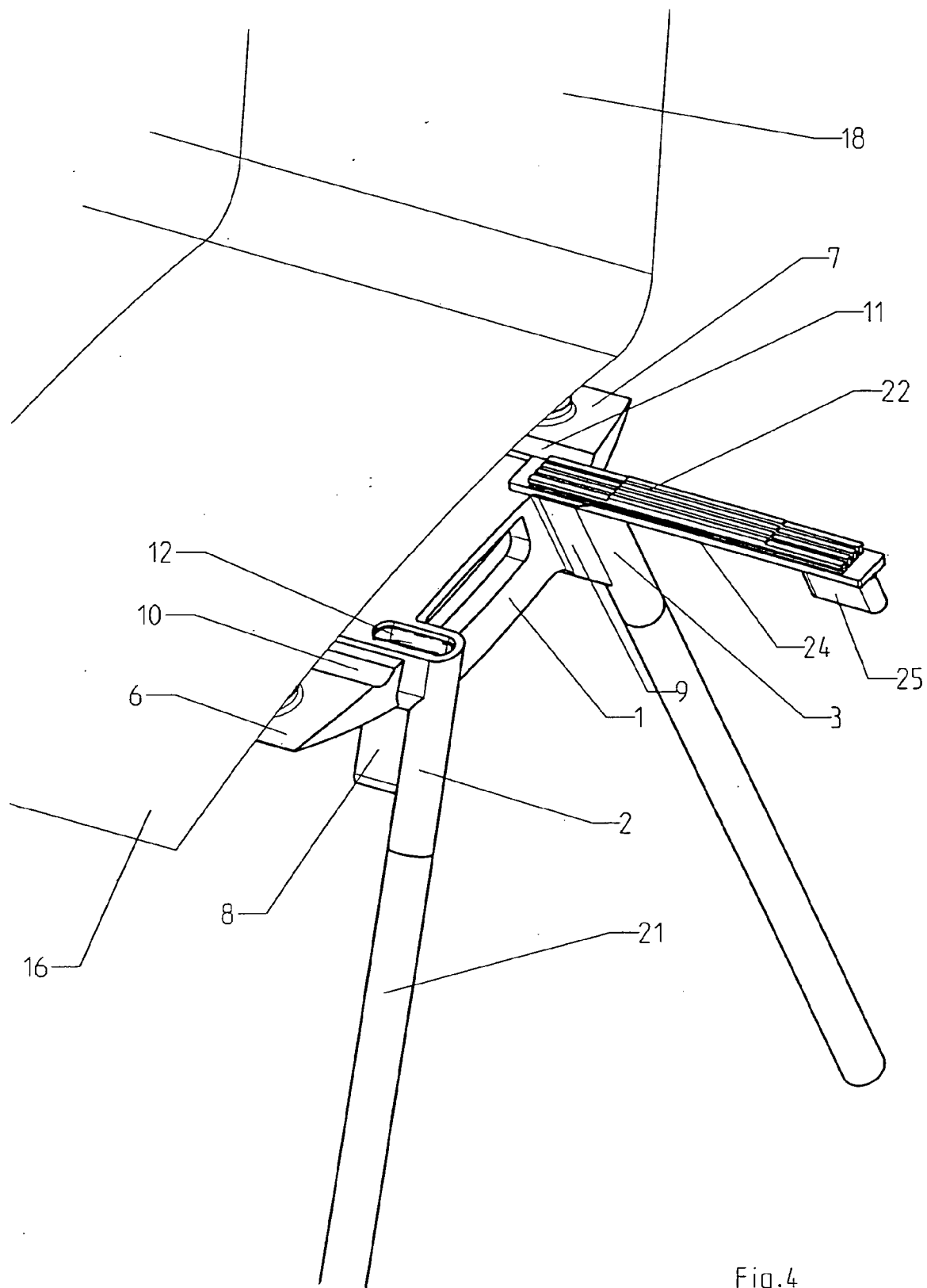


Fig.3



COMPONENT FOR A STACKABLE CHAIR

TECHNICAL FIELD

[0001] The invention relates to the field of seating furniture, in particular to a component for a stackable chair for multipurpose use.

PRIOR ART

[0002] In many cases, for example for providing seating in large rooms, such as conference and assembly halls, it is necessary for it to be possible for the chairs to be easily cleared away in a space-saving manner and then also set out again. Vertically or even horizontally stackable chairs are customary for this purpose.

[0003] A vertically stackable chair is known, for example, from DE 197 45 072 A1. This known chair has a leg frame which comprises V-shaped tubes as legs at the side and a transverse tube which connects the two side parts to one another at their vertices. Bearing protrusions are provided on the underside of the transverse tube, and sliding blocks are provided at the leg ends. During stacking, the upper chair rests on the lower chair by way of the bearing protrusions and the sliding blocks.

[0004] The known chair is not of particularly robust design. Furthermore, the chairs tend to jam during stacking and therefore have to be positioned very carefully one upon the other. The stacks tend to be unstable. Special features, for example armrests or elements for interlinking the chairs with other chairs, as safeguards for a panic situation, are not possible.

DESCRIPTION OF THE INVENTION

[0005] The object of the invention is thus to configure a stackable chair such that, on the one hand, straightforward, robust and reliable stacking is possible but, on the other hand, it is also possible to provide special features such as armrests and panic bolts, although the chair is nevertheless cost-effective to produce and straightforward to assemble.

[0006] This object is achieved by a component having the features of claim 1 and of the subclaims.

[0007] The invention is based on the idea of providing a stackable chair with two components which are connected via crossmembers and are in the form of “multifunctional joint components” which each comprise a cuboidal basic body with bevelled ends which has noses on its underside and channels on its top side. This component has stubs retaining the chair legs and the crossmembers. During stacking, the oblique basic-body ends, which have a centring effect, bring the chair into the correct position, with the result that the noses of the upper chair enter into the channels of the lower chair. This achieves stable seating for one chair on the other, even if the chairs are positioned without particular care one upon the other. The components according to the invention, that is to say the “multifunctional joint components”, may, furthermore, bear armrests, possibly with writing surfaces, or members for interlinking the chairs with other chairs, as panic bolts.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The invention is explained in more detail hereinbelow with reference to an exemplary embodiment illustrated in drawings, in which:

[0009] FIG. 1 shows a perspective view from the front left of a chair provided with two components according to the invention,

[0010] FIG. 2 shows a perspective view from above of the component according to the invention,

[0011] FIG. 3 shows a view from beneath of the chair illustrated in FIG. 1, and

[0012] FIG. 4 shows the chair illustrated in FIG. 1, with an interlinking member as a panic bolt.

METHODS OF IMPLEMENTING THE INVENTION

[0013] FIG. 1 illustrates a chair with a seat panel 16, a backrest support 17 and a backrest 18. On both sides, beneath the seat panel 16, the chair has in each case one component according to the invention, a “multifunctional joint component”, in which case, of the component on the right-hand side of the chair, only the rear, empty pocket 13 and the front pocket with the armrest 23 can be seen.

[0014] Of the component on the left-hand side of the chair, it is possible to see the basic body 1 and the front and rear leg stubs 2 and 3, respectively. The basic body 1 has the ends 6 and 7, which are bevelled at the sides. It is also possible to see the noses 8 and 9 and the channels 10 and 11. The pockets 12 and 13 are also illustrated.

[0015] As can be seen, the four chair legs have been plugged into the leg stubs 2 and 3. The armrest 23 has been plugged into the front pocket (not designated) of the component on the right-hand side of the chair, this pocket corresponding to the pocket 12 of the component on the left-hand side of the chair. The other three pockets are not in use. They may be closed, for example, by dummy stoppers.

[0016] FIG. 2 illustrates the component according to the invention in detail. In addition to the details which have already been described in relation to FIG. 1, the bearing protrusions 14 and 15 are also illustrated here, as are the crossmember stubs 4 and 5. The crossmember stubs 4 and 5 are plugged into the tubular crossmembers 19 and 20 illustrated in FIG. 3.

[0017] In the assembled state, the seat panel 16 is screwed to the bearing protrusions 14, 15, which consist, for example, of rubber.

[0018] FIG. 4 once again shows the chair which has already been illustrated in FIG. 1, the interlinking member 22 at the rear left of the chair being illustrated here. This interlinking member comprises a link plate 24 with two stubs 25, of which one is plugged into the pocket 13. The other stub 25 may then be plugged into the corresponding pocket of the neighbouring chair.

[0019] The component according to the invention may consist, for example, of cast aluminium. However, it may also consist of a suitable plastic, for example glass-fibre-reinforced polyamide, with metallic inserts.

[0020] As can be seen, the chairs can be stacked without any particular care; they can be, as it were, thrown together but, as a result of the bevelled ends 6, 7 of the basic body 1, said ends having a centring action, the upper chair always ends up in the correct position, with the result that the noses 8, 9 of the upper chair engage in the corresponding channels

10, 11 of the lower chair. This produces a very stable chair stack, although the latter can also be taken apart again very easily. The components are identical for both sides of the chair, and there is thus no need for any separate production, storage and assembly for the left-hand and right-hand sides. The chairs are thus cost-effective to produce and straightforward to assemble, but, if required, can also be quickly and easily provided with extras such as armrests and interlinking elements. It is also possible, for example, for seat numbers to be inserted into the pockets.

[0021] List of Designations:

- [0022]** 1 Basic body
- [0023]** 2 First leg stub
- [0024]** 3 Second leg stub
- [0025]** 4 First crossmember stub
- [0026]** 5 Second crossmember stub
- [0027]** 6 First end of the basic body
- [0028]** 7 Second end of the basic body
- [0029]** 8 First nose
- [0030]** 9 Second nose
- [0031]** 10 First channel
- [0032]** 11 Second channel
- [0033]** 12 First pocket
- [0034]** 13 Second pocket
- [0035]** 14 First bearing protrusion
- [0036]** 15 Second bearing protrusion
- [0037]** 16 Seat panel
- [0038]** 17 Backrest support
- [0039]** 18 Backrest
- [0040]** 19 First crossmember
- [0041]** 20 Second crossmember
- [0042]** 21 Chair leg
- [0043]** 22 Interlinking member

[0044] 23 Armrest

[0045] 24 Link plate

[0046] 25 Stub of the interlinking member

1. Component for a stackable chair, characterized in that it comprises a cuboidal basic body (**1**) which, on one vertical longitudinal side, has two leg stubs (**2, 3**), which are oriented obliquely in the forward and rearward directions, and, on its other vertical longitudinal side, has two horizontal crossmember stubs (**4, 5**), which are located perpendicularly to this latter longitudinal side, and the two ends (**6, 7**) of the basic body (**1**) are bevelled in the forward and rearward directions at the sides, and noses (**8, 9**) which run parallel to the leg stubs (**2, 3**) are provided on the latter in each case, on the underside of the basic body, and channels (**10, 11**) are provided above the noses (**8, 9**), on the top side of the basic body (**1**).

2. Component according to claim 1, characterized in that pockets (**12, 13**) which are open at the top are provided on the top side of the basic body (**1**), at the end of the leg stubs (**2, 3**).

3. Component according to claim 1, characterized in that in each case one bearing protrusion (**14, 15**) for the seat panel (**16**) of the chair is provided on the top side of the two ends (**6, 7**) of the basic body.

4. Component according to claim 1, characterized in that it consists of cast aluminium or plastic with metal inserts, e.g. glass-fibre-reinforced polyamide.

5. Stackable chair with two components according to one of the preceding claims, characterized in that the two components are identical and are connected to one another by two crossmembers (**19, 20**) fastened on the crossmember stubs (**4, 5**), in each case one chair leg (**21**) being fastened on the leg stubs (**2, 3**), and the crossmembers (**19, 20**) running beneath the seat panel (**16**).

6. Chair according to claim 5, characterized in that an armrest (**23**) is plugged into a front pocket (**12**) of the basic body.

7. Chair according to claim 5, characterized in that an interlinking member (**22**) for connecting the chair to another chair is plugged into a rear pocket (**13**).

* * * * *