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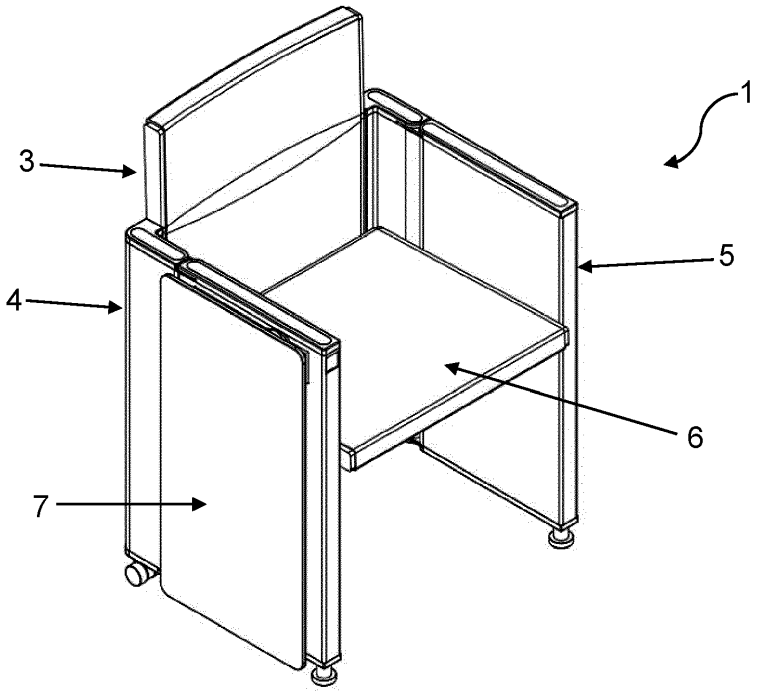
(54) ARMCHAIR FOR USE IN MULTI-PURPOSE ROOMS, LECTURE HALLS OR CLASSROOMS

(57) An armchair (1) for use in multi-purpose rooms, lecture halls or classrooms, comprising:
a backrest (3);
two flanks (4, 5) extending on two opposite sides of the backrest (3) moving away therefrom;
a table (7) fitted to one of the two flanks (4, 5);
overturning means (8) for overturning the table (7) relative to the corresponding flank (4, 5), so that said table (7) can move from a rest configuration, in which it is arranged to the side of the flank (4, 5), to a work configuration, in which it is arranged transversely to the flank (4, 5) to define a rest plane and vice versa.

The table (7) is slidably mounted on the corresponding flank (4, 5) so as to slide towards/away from the backrest (3).

FIG. 1



EP 4 397 209 A1

Description

[0001] The present invention relates to an armchair for use in multi-purpose rooms, lecture halls or classrooms. In particular, the armchair is of the single type. Different models of armchairs are known for use in lecture halls, university classrooms or multi-purpose rooms. Among these, some are provided with a table that can be overturned between a closed configuration, in which it is vertical and side by side with the chair, and a work configuration, in which it is used as a support. The movement of the table between the two configurations takes place by means of two sequential rotations with respect to two axes that are orthogonal to each other.

[0002] The main drawback of the known solutions is that the position of the table with respect to the user is not customisable. This causes discomfort in some people, especially large people or pregnant women.

[0003] There is a need in the sector for a solution that solves this problem.

[0004] In this context, the technical task underlying the present invention is to propose an armchair for use in multi-purpose rooms, lecture halls or classrooms, which overcomes the drawbacks of the prior art mentioned above.

[0005] In particular, an object of the present invention is to propose an armchair for use in multi-purpose rooms, lecture halls or classrooms, in which the position of the table is adaptable to the needs of the user.

[0006] Another object of the present invention is to make available an armchair for use in multi-purpose rooms, lecture halls or classrooms, which is safe and comfortable for the user.

[0007] The stated technical task and the specified objects are substantially achieved by an armchair for use in multi-purpose rooms, lecture halls or classrooms, comprising:

a backrest;
two flanks extending on two opposite sides of the backrest moving away therefrom;
a table fitted to one of the two flanks;
overturning means for overturning the table relative to the corresponding flank, so that said table can move from a rest configuration, in which it is arranged to the side of the flank, to a work configuration, in which it is arranged transversely to the flank to define a rest plane and vice versa.

[0008] The table is slidably mounted on the corresponding flank so as to slide towards/away from the backrest.

[0009] In accordance with one embodiment, the armchair comprises a guide fitted along the corresponding flank and a sliding block slidably mounted on the guide. The table is connected to the sliding block.

[0010] In accordance with one embodiment, the guide extends along the flank between a first end and a second end that define respectively a minimum distance position and a maximum distance position that the table can adopt with respect to the backrest.

[0011] In accordance with one embodiment, the guide is a rail.

[0012] In accordance with one embodiment, the armchair comprises a rod mounted on the sliding block, said rod so extending as to partially protrude from the sliding block, said table being mounted on the protruding portion of the rod. In accordance with one embodiment, the overturning means is located interposed between the rod and the table.

[0013] In accordance with one embodiment, the overturning means comprises one or more anti-panic joints.

[0014] In accordance with one embodiment, the table has dimensions such that, in the work configuration, an end thereof rests on the flank opposite the flank to which it is fitted.

[0015] Preferably, the overturning means is shaped to impose on the table, in the passage from the rest configuration to the work configuration, two sequential rotations relative to two axes that are orthogonal to one another. Preferably, in the rest position the table is substantially parallel to the corresponding flank.

[0016] Further features and advantages of the present invention will become more apparent from the following indicative, and hence non-limiting, description of a preferred, but not exclusive, embodiment of an armchair for use in multi-purpose rooms, lecture halls or classrooms, as illustrated in the accompanying drawings in which:

- figures 1-6 illustrate perspective views of an armchair for use in multi-purpose rooms, lecture halls or classrooms, according to the present invention, in different configurations;
- figure 7 illustrates a top view of the armchair of figure 1.

[0017] With reference to the figures, the number 1 indicates an armchair for use in multi-purpose rooms, lecture halls or classrooms.

[0018] Typically, an armchair comprises a body 2 formed by a backrest 3, two flanks 4, 5 extending on two opposite sides of the backrest 3 moving away therefrom and a seating 6.

[0019] In the illustrated embodiment, the armchair is of the tub type. In this context, "tub" armchair means a type of armchair in which the seat is delimited by a backrest and by two flanks that extend substantially as far as the ground (apart from feet or rest wheels). The upper part of the flanks defines the area of the armrests.

[0020] Nevertheless, the present invention finds application in other types of single-type armchairs.

[0021] Preferably, the flanks 4, 5 are cold-foamed. Alternatively, the flanks 4, 5 are made of another type of polyurethane.

[0022] Preferably, the backrest 3 is flexible. For example, the backrest 3 comprises harmonic iron straps.

[0023] The armchair 1 comprises a table 7 fitted to one of the two flanks 4, 5.

[0024] The armchair 1 comprises overturning means 8 for overturning the table 7 relative to the corresponding flank 4, 5. The table 7 can be moved between two "limit" configurations, that is:

- a rest configuration, in which it is arranged laterally to the corresponding flank 4, 5;
- a work configuration, in which it is arranged transversely to the corresponding flank 4, 5.

[0025] In the work configuration, the table 7 defines a rest plane.

[0026] In particular, the rest configuration is a non-use configuration.

[0027] Preferably, the table 7 has a predominantly planar extension.

[0028] Preferably, in the rest configuration, the table 7 has a prevalent extension along a first direction. Preferably, the first direction is substantially vertical.

[0029] Preferably, in the rest configuration, the table 7 has extension along an extension direction in height of the flank 4, 5.

[0030] Preferably, in the rest configuration the table 7 is substantially parallel to the flank 4, 5.

[0031] Preferably, in the work configuration the table 7 has a prevalent extension along a second direction. Preferably, the second direction is substantially horizontal.

[0032] Preferably, in the work configuration the table 7 has an extension between one flank 4, 5 and the other.

[0033] Preferably, in the work configuration the table 7 is substantially parallel to the seating 6.

[0034] Preferably, in the work configuration the table 7 is substantially parallel to a floor or to a rest surface.

[0035] Preferably, the table 7 has dimensions such that, in the work configuration, an end thereof rests on the flank 4, 5 opposite the flank to which it is fitted. This increases safety and prevents the table 7 from bending.

[0036] In the preferred embodiment, the table 7 is about 60 centimetres long. In fact, the table 7 used in the present invention is referred to as a large table. Length refers to the dimension that, in the work configuration, extends between a flank 4,5 and the other.

[0037] The overturning means 8 is of known type and will not be further described. Preferably, the overturning means 8 is shaped to impose on the table 7, in the passage from the rest configuration to the work configuration, two sequential rotations relative to two axes that are orthogonal to one another. As is known, each rotation takes place thanks to a joint.

[0038] As illustrated in sequence in figures 2, 3, 5, the table 7 starts from the rest configuration, is first overturned into a position with vertical extension upwards and subsequently brought into the work configuration.

[0039] For example, document EP1537806A1 describes one of the many possibilities available to the person skilled in the art to make the overturning means, known per se.

[0040] Preferably, the overturning means 8 comprises one or more joints of the anti-panic type. This means that the return to the rest configuration is automatic. These joints are of a known type and will not be described further.

[0041] Originally, the table 7 is slidably mounted on the corresponding flank 4, 5 so as to slide towards/away from the backrest 3.

[0042] This can happen both in the rest configuration and in the work configuration. In particular, figures 1 and 2 illustrate the possibility of sliding in the rest configuration. Figures 5 and 6 illustrate the possibility of sliding in the work configuration.

[0043] In the embodiment described and illustrated herein, the armchair 1 comprises a guide 9 fitted to the flank 4, 5 and a sliding block 10 slidably mounted on the guide 9. The table 7 is connected to the sliding block 10 so that it can slide along the guide 9.

[0044] In the illustrated embodiment, the guide 9 is a rail.

[0045] Suitably, the guide 9 has extension along an extension direction of the flank 4, 5 moving away from the backrest 3.

[0046] In particular, the flank 4, 5 extends along a height direction and a width direction that are orthogonal to each other. The height direction is a direction in which the distance from a rest surface or floor increases (or decreases, depending on the direction in which it is considered) progressively. The width direction is an extension direction substantially parallel to the rest surface or floor.

[0047] The guide 9 has extension along a width direction of the corresponding flank 4, 5.

[0048] Preferably, the guide 9 is mounted on an upper portion of the flank 4, 5.

[0049] Preferably, the guide 9 extends along the flank 4, 5 between a first end 9a and a second end 9b that define respectively a minimum distance position and a maximum distance position that the table 7 can adopt with respect to the backrest 3.

[0050] Preferably, the chair 1 comprises a rod 11 mounted on the sliding block 10 so as to partially protrude therefrom. The table 7 is mounted on the protruding portion of the rod 11.

[0051] Preferably, the overturning means 8 is located interposed between the rod 11 and the table 7. In other words, the table 7 is mounted on the rod 11 by means of the overturning means 8.

[0052] In the figures, the guide 9, the sliding block 10 and the table 7 are illustrated by way of example mounted on the right flank. There is no obstacle for them to be mounted on the left flank.

[0053] The characteristics of the armchair for use in multi-purpose rooms, lecture halls or classrooms according to the present invention emerge clearly from the above description, as do the advantages.

[0054] In particular, the possibility of sliding the table towards/away with respect to the backrest makes the use of the armchair comfortable and functional for any user, even with above-average builds, including pregnant women.

[0055] The presence of an anti-panic system and the possibility of resting the table on the opposite flank contribute to the safety of the armchair.

Claims

1. An armchair (1) for use in multi-purpose rooms, lecture halls or classrooms, comprising:

   a backrest (3);
   two flanks (4, 5) extending on two opposite sides of the backrest (3) moving away therefrom;
   a table (7) fitted to one of the two flanks (4, 5);
   overturning means (8) for overturning the table (7) relative to the corresponding flank (4, 5), so that said table (7) can move from a rest configuration, in which it is arranged to the side of the flank (4, 5), to a work configuration, in which it is arranged transversely to the flank (4, 5) to define a rest plane and vice versa,
   characterised in that said table (7) is slidably mounted on the corresponding flank (4, 5) so as to slide towards/away from the backrest (3).

2. The armchair (1) according to claim 1, comprising a guide (9) fitted along the corresponding flank (4, 5) and a sliding block (10) slidably mounted on the guide (9), said table (7) being connected to the sliding block (10).

3. The armchair (1) according to claim 2, wherein the guide (9) extends along the flank (4, 5) between a first end (9a) and a second end (9b) that define respectively a minimum distance position and a maximum distance position that the table (7) can adopt with respect to the backrest.

4. The armchair (1) according to claim 2 or 3, wherein the guide (9) is a rail.

5. The armchair (1) according to claim 2 or 3 or 4, comprising a rod (11) mounted on the sliding block (10), said rod (11) so extending as to partially protrude from the sliding block (10), said table (7) being mounted on the protruding portion of the rod (11).

6. The armchair (1) according to claim 5, wherein said overturning means (8) is located interposed between the rod (11) and the table (7).

7. The armchair (1) according to any one of the preceding claims, wherein the overturning means (8) comprises one or more anti-panic joints.

8. The armchair (1) according to any one of the preceding claims, wherein the table (7) has such dimensions that in the work configuration an end thereof rests on the flank (4, 5) opposite the flank to which it is fitted.

9. The armchair (1) according to any one of the preceding claims, wherein said overturning means (8) is shaped so as to impose on the table (7), in the passage from the rest configuration to the work configuration, two sequential rotations relative to two axes that are orthogonal to one another.

10. The armchair (1) according to any one of the preceding claims, wherein in the rest position the table (7) is substantially parallel to the corresponding flank (4, 5).

FIG. 1

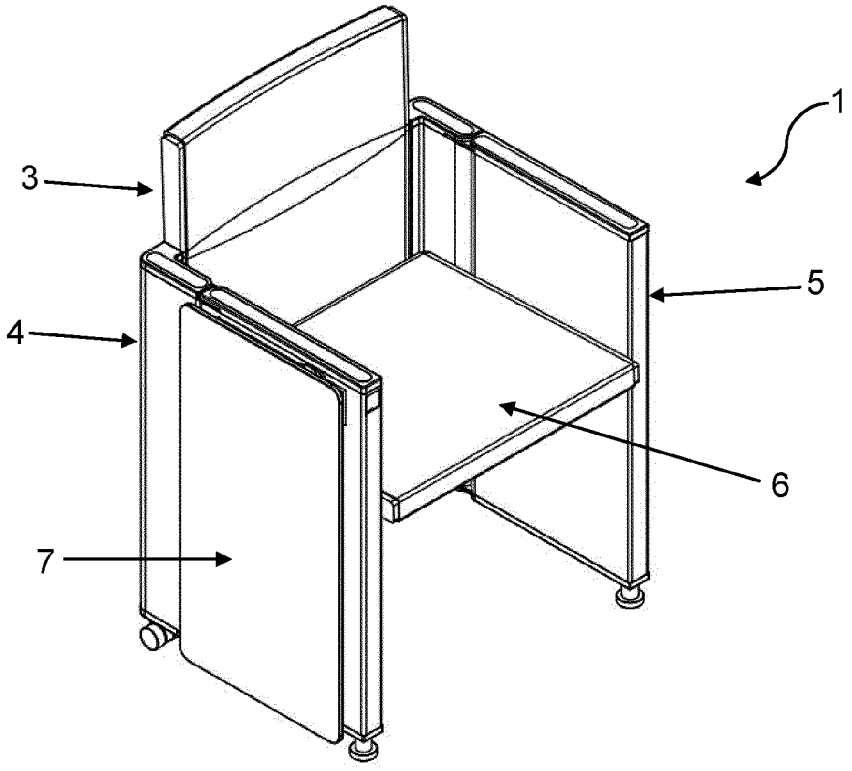


FIG. 2

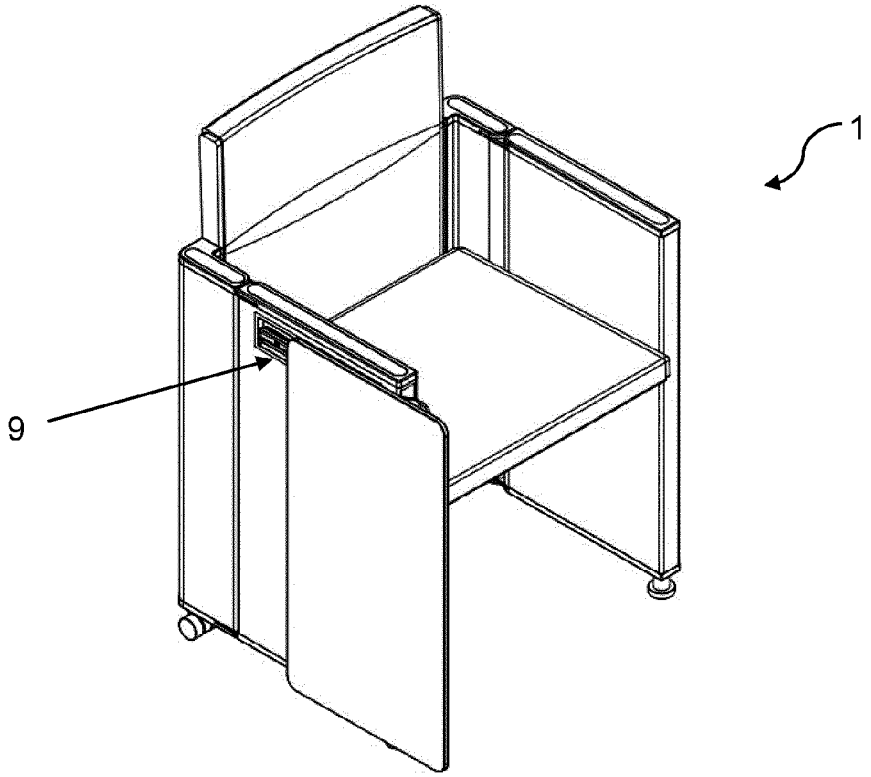


FIG. 3

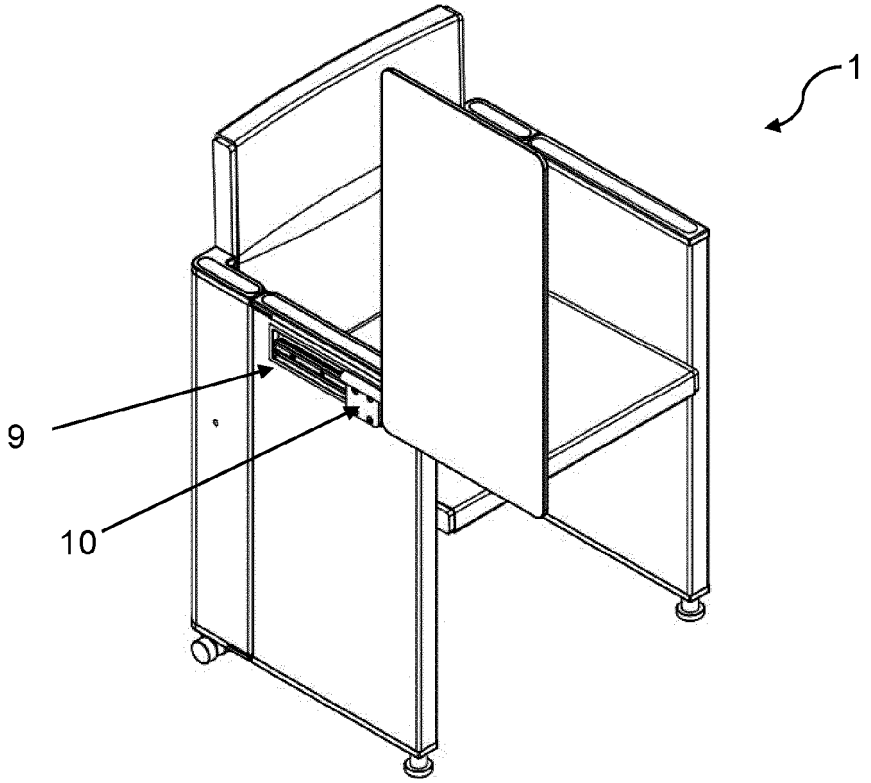


FIG. 4

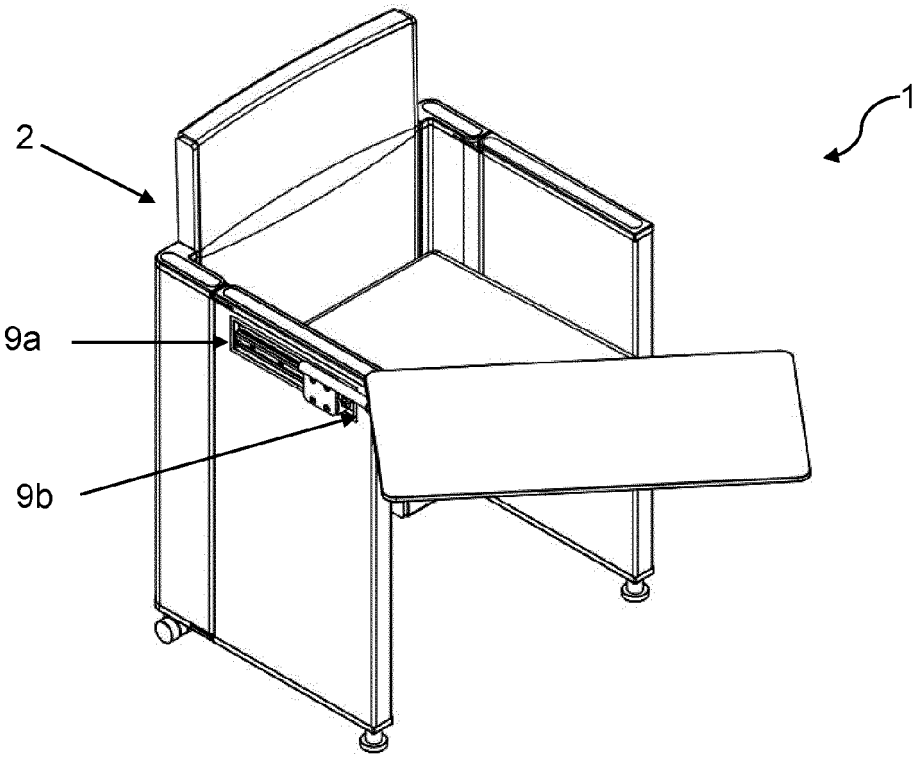


FIG. 5

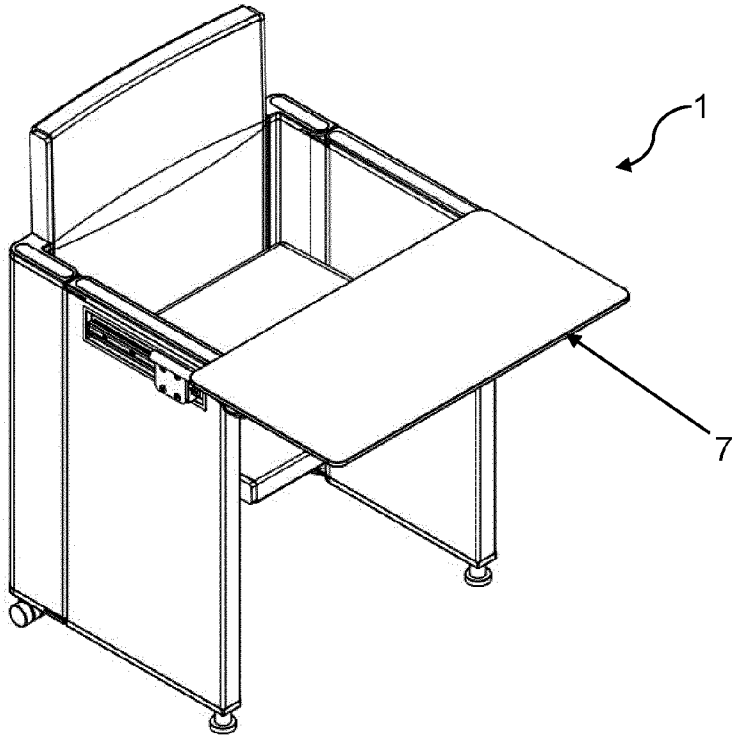


FIG. 6

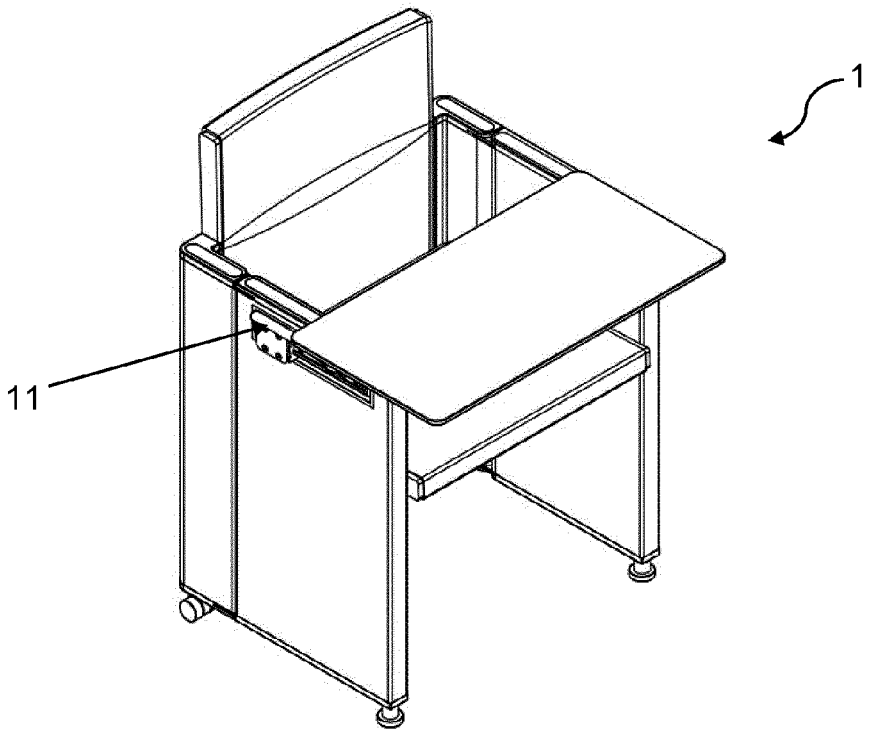
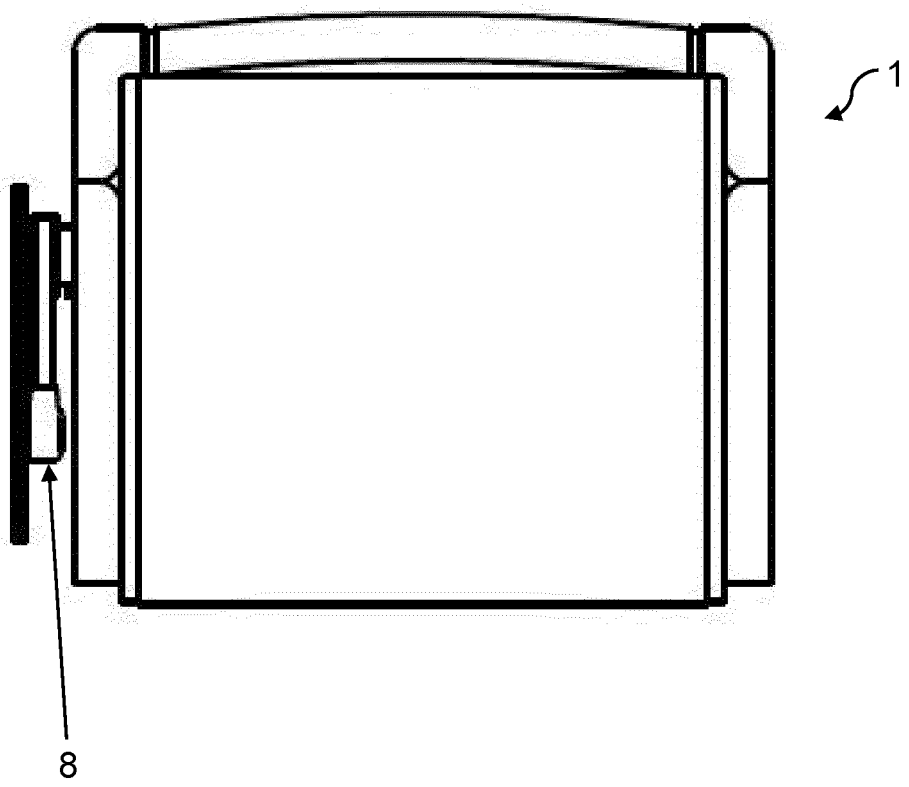


FIG. 7



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EUROPEAN SEARCH REPORT

Application Number
EP 23 21 9753

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X Y	US 5 547 247 A (DIXON RICHARD W [US]) 20 August 1996 (1996-08-20) * paragraph [0010] - paragraph [0037]; figures 1-13 *	1-7,9,10 8	INV. A47C7/68
X	US 2012/223548 A1 (SHARBER JERRY [US] ET AL) 6 September 2012 (2012-09-06) * column 2, line 50 - column 5, line 55; figures 1-10 *	1-7,9,10	
Y	GB 555 531 A (WILLIAM EDGAR EVANS) 26 August 1943 (1943-08-26) * the whole document *	8	
			TECHNICAL FIELDS SEARCHED (IPC) A47C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	16 May 2024	Lehe, Jörn

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 23 21 9753

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16-05-2024

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5547247 A	20-08-1996	NONE	
US 2012223548 A1	06-09-2012	NONE	
GB 555531 A	26-08-1943	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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