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(54) **IMPROVED STRUCTURE FOR A RELAX ARMCHAIR**

(57) An improved structure (S) for a relax armchair comprises a reclining backrest (1) frame (T1), a seat frame (T2) (2) equipped with mesh means (R) and a base element (3) , that said backrest (1) frame (T1) being connected to first movement means (A) for moving said backrest (1) from and towards a reclined position (PR) of said backrest (1), and said seat frame (T2) (2) is provided with extension members (K) connected to second movement means (B) for moving said seat (2) from and towards an extended open position (PE) .

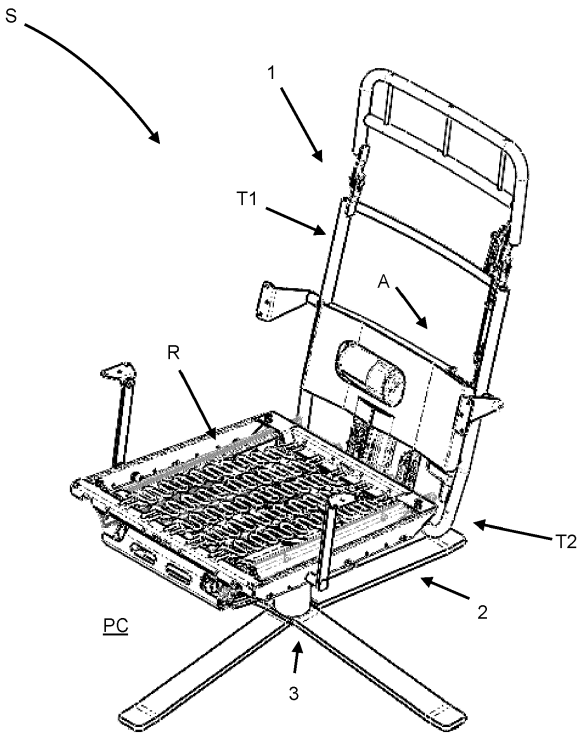

FIG. 1

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Description

[0001] The present model relates to an improved structure for a relax armchair.

[0002] In particular, the model in question is advantageously used in the sector of production and marketing of upholstered furniture such as armchairs, chairs or equivalent which can be reclined and with mobile parts which can be extended or opened and extended, thus allowing the users to lie down in a rest position.

[0003] The object of the present model is that of realizing an armchair structure with a reclining backrest and with extensible front parts which is easy and practical to use and capable of being effectively and quickly brought to and from its open configuration. Another object of the present model is to provide an armchair structure which in its open configuration allows a comfortable and effective support of the users' legs for a comfortable relaxing position.

[0004] The structural and functional characteristics of the present model and its advantages over the known art will result even more clear and evident from the underlying claims, and in particular from an examination of the following description, referred to the attached drawings, which show the schematization of a preferred but non-limiting embodiment of an improved structure of a relaxation chair, wherein:

- Figure 1 is a perspective view of the improved frame structure for a relaxation chair subject of the present model in its first closed position;

  Figure 2 represents an exploded schematic perspective view of the frame structure in question;
  Figure 3 is a plan view of a seat of the relaxation chair frame structure in the closed position of Figure 1;
  Figure 4 is a plan view of a seat of the relax armchair frame structure in its second position of open extended configuration; And

- Figure 5 represents a schematic perspective view of the frame structure in question in the open operating position of Figure 4.

[0005] With reference to the attached figures 1 to 5, S globally indicates a structure used in the sector of production and marketing of upholstered furniture such as armchairs, chairs or equivalent with reclining backs and with extensible or open and elongated movable front parts.

[0006] The structure S comprises a reclining backrest 1 frame T1 adapted to be in use, moved and movable from and to a reclined position PR (Figure 5) under the thrust of movement means A, a seat frame T2 2 provided with means 3 to mesh and extension members K for extending the seat 2 itself from and towards an extended open position PE (Figures 4 and 5), and a base element 3 of the four-beam type to support the structure ST itself (Figure 2).

[0007] The aforesaid movement means A are substantially defined as actuator means A of the gas piston type or equivalent able to act on the aforesaid backrest 1 on command of remote control means (known and not illustrated) and actuated by the user.

[0008] The aforementioned extension members K of the frame T2 of the seat 2 are defined by a plurality of telescopic rod means 4 arranged hidden under the seat 2 (Figures 1 and 2) in their closed position PC to open and extend until reaching the position extended PE (Figures 3 and 4) under the thrust of movement means B of the toothed wheel type 5 acting on rack guides Z or equivalent able to act on the members K on command of remote control means (known and not shown) and operated by the user.

[0009] In this way, in correspondence with the cited position PE of the structure S, the user's legs can comfortably rest on a platform 6 carried at the end of the cited members K, as can be better seen in the attached Figures 3 and 4.

[0010] Preferably but not limitedly, as better illustrated in Figure 5, the reclined position of the backrest 1 and the open position PE are used in combination or simultaneously, for an optimal comfort and rest for the user.

Claims

1. Improved structure (S) for a relaxation armchair, comprising a reclining backrest (1) frame (T1), a seat frame (T2) (2) provided with mesh means (R) and an element (3) of base, **characterized in that** said backrest (1) frame (T1) is connected to first movement means (A) to move said backrest (1) to and from a reclined position (PR) of said backrest (1) and that said seat frame (T2) (2) is provided with extension members (K) connected to second handling means (B) for moving said seat (2) from and towards an extended open position (PE).

2. Structure according to claim 1, **characterized in that** the said extension members (K) of the said frame (T2) of the seat (2) are defined by a plurality of telescopic rod means (4) arranged hidden below the said seat (2) in correspondence with its closed position (PC) to open and extend until it reaches said extended position (PE) .

3. Structure according to claim 1 or 2, **characterized in that** said first movement means (A) comprise piston actuator means.

4. Structure according to one or more of claims from 1 to 3, **characterized in that** said second handling means (B) comprise toothed rack means (5,Z).

5. Structure according to one or more of claims from 1 to 4, **characterized in that** said first and second movement means (A,B) are operated in combination by means of remotely controlled means.

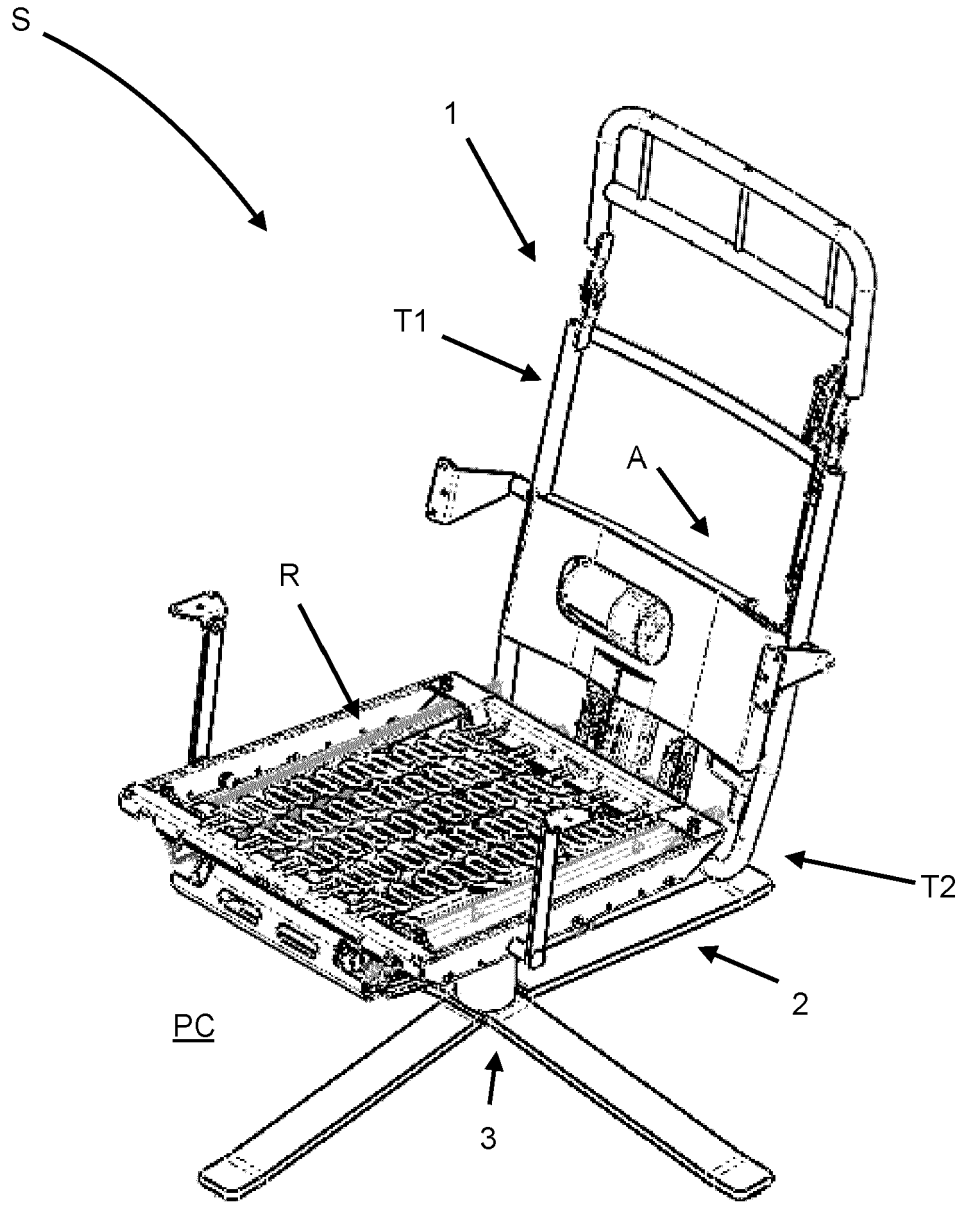

FIG. 1

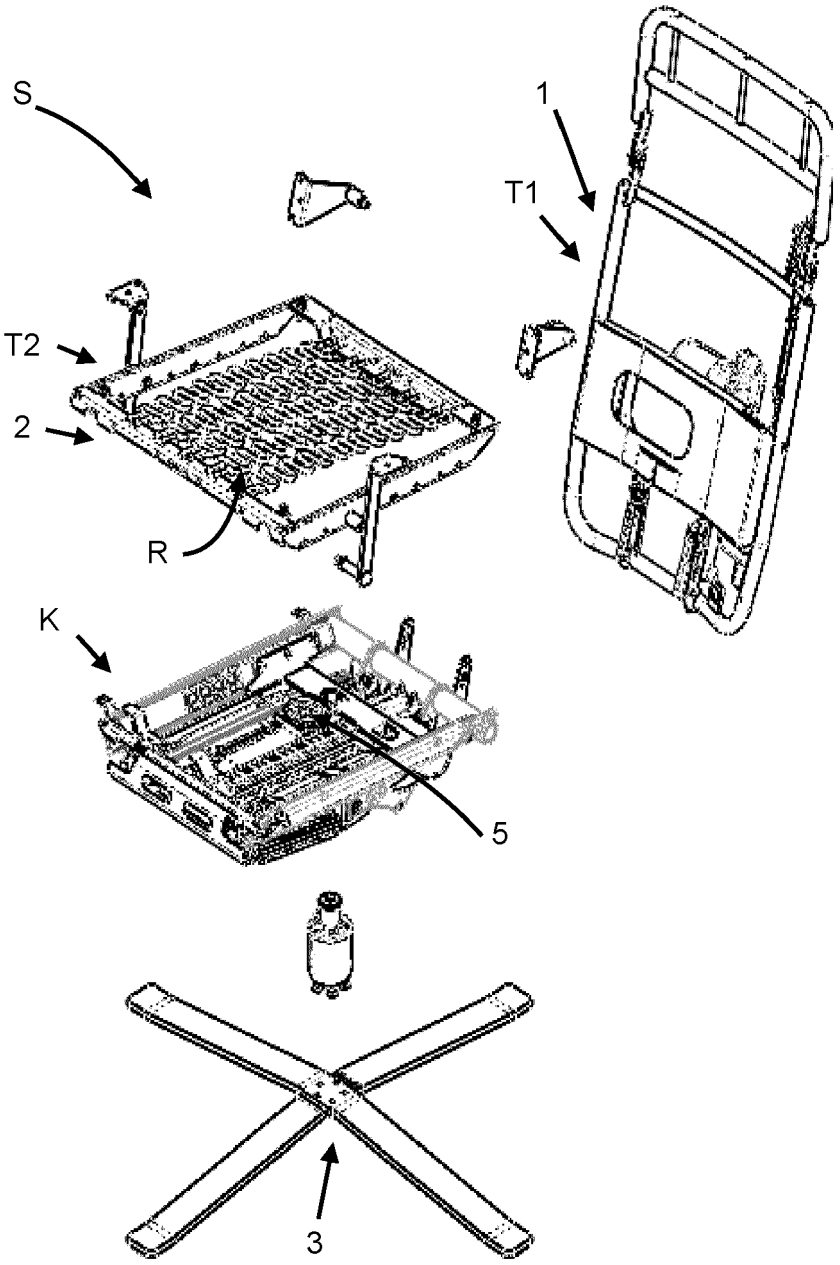

FIG. 2

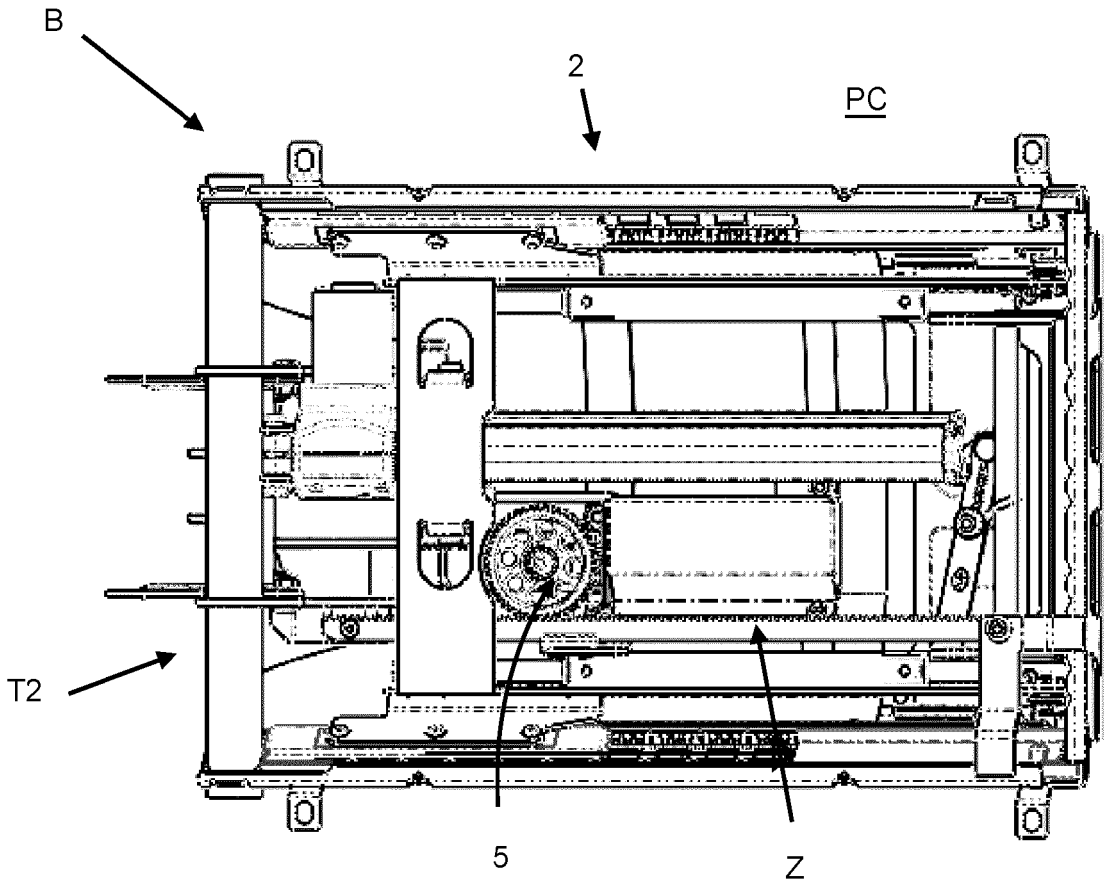

FIG. 3

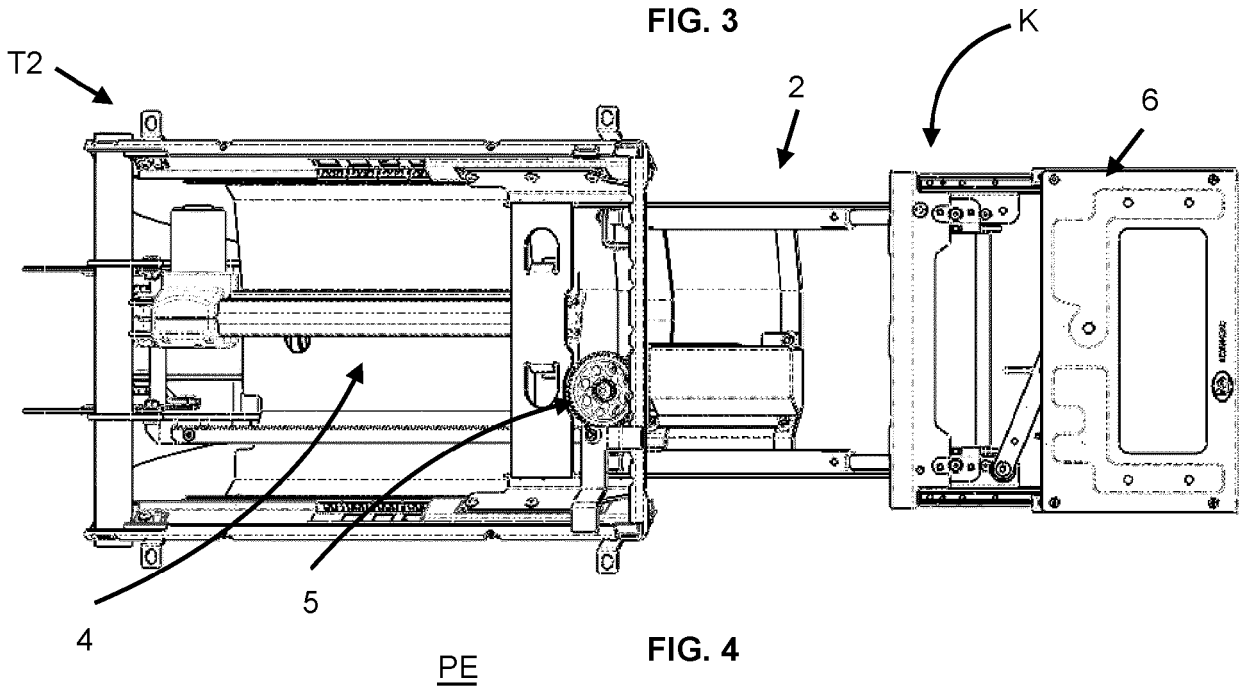

FIG. 4

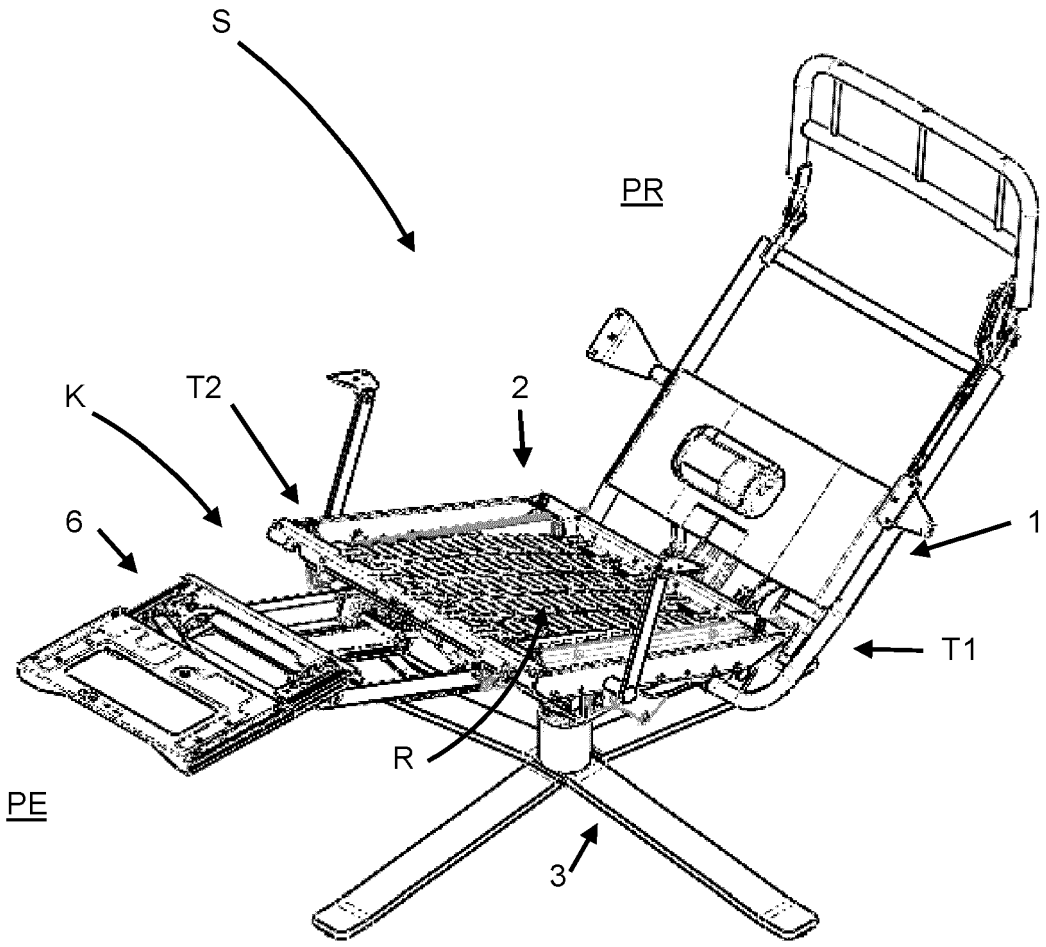

FIG. 5

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EUROPEAN SEARCH REPORT

Application Number
EP 23 18 2937

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	US 5 882 083 A (ROBINSON BONNIE A [US]) 16 March 1999 (1999-03-16) * figures 12, 13 * * claim 5 *	1-5	INV. A47C1/034
X	EP 1 974 633 A2 (OLSBERG HERMANN EVERKEN GMBH [DE]) 1 October 2008 (2008-10-01) * figures 1-13 * * paragraph [0041] *	1-5	
X	EP 1 074 202 A1 (STELTEMEIER JOSEF GMBH [DE]) 7 February 2001 (2001-02-07) * figures 1, 2 *	1-5	
A	KR 2020 0100308 A (SHINSUNG UNIV [KR]) 26 August 2020 (2020-08-26) * figure 4 *	4	

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	25 October 2023	Linden, Stefan

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 23 18 2937

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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25-10-2023

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