(19) Europäisches Patentamt
European Patent Office
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(11) **EP 4 166 042 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
19.04.2023 Bulletin 2023/16

(21) Application number: **22192665.2**

(22) Date of filing: **29.08.2022**

(51) International Patent Classification (IPC):
A47C 7/50 *(2006.01)*

(52) Cooperative Patent Classification (CPC):
A47C 7/5062; A47C 7/5066

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME
Designated Validation States:
KH MA MD TN

(30) Priority: **18.10.2021 IT 202100004967 U**

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(54) **MOVING MECHANISM**

(57) A moving mechanism (M) including a rectangular-shaped structure (S) defined by side members means (CL, L1, L2) parallel to each other and plate-like means (CP, D1, D2) transversally arranged in relation to said side members (L1, L2); a transversal element (T) being arranged between said side members means (CL, L1, L2) and movable along a cylindric guide (CG) parallel to the side members means (C1, L1, L2) between a first position (P1) and a second position (P2); said transversal element (T) including arm-like means (CB, B1, B2) fixed to opposing ends of said transversal element (T) to support centred rod-like means (M1, M2), and plate-like means (Z1, Z2) centred to the rod-shaped means (M1, M2).

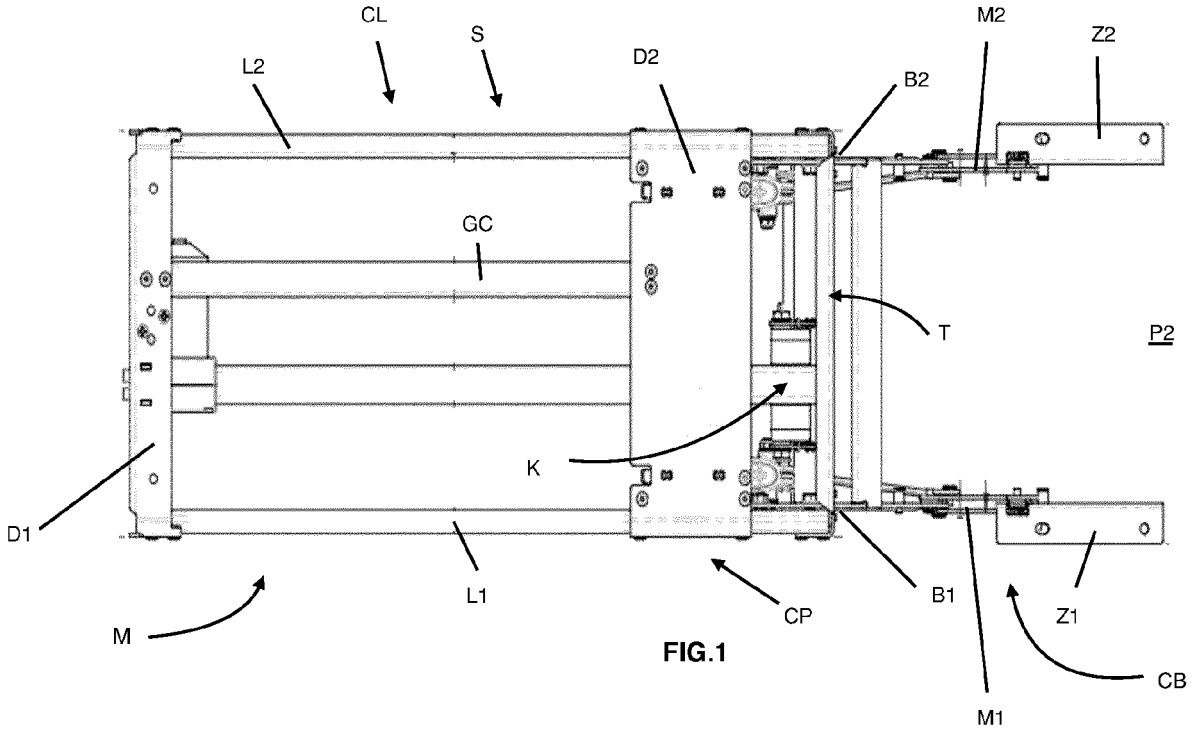

FIG.1

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Description

[0001] The present application relates to a moving mechanism. Particularly, the application herein is advantageously employed in the field of upholstered furniture to move retractable movable parts of sofas, armchairs, or the like such as footrest, leg rest or equivalent movable elements from a retracted rest position to a raised up operating position, which the following description will explicitly refer to without losing generality for this reason.

[0002] Aim of the application herein is to provide a moving mechanism, which is easy, comfortable, and quick to use, and being able to be effectively and rapidly assembled on sofas and armchairs parts or the like.

[0003] The structural and functional features of the application herein and its advantages compared to the known prior art will be even more clear and obvious from the claims below, and especially from an examination of the following description, referred to the attached drawings, showing the schematisation of a preferred but limited embodiment of a moving mechanism for movable retractable parts of an upholstered furniture, wherein:

- Figure 1 is a top plan view of moving mechanism herein;
- Figure 2 is a side view of the mechanism of figure 1, in its own rest position; and
- Figure 3 is a side view of the mechanism of figure 1, in its own operating position.

[0004] With reference to the attached figures 1, 2, and 3 with M a moving mechanism is globally referred to and being able to be advantageously used in the field of upholstered furniture to move movable retractable parts of sofas, armchairs, or the like, as such footrest or leg rest panel elements from a retracted rest position to a raised-up operating position.

[0005] The mechanism M being able to be assembled in a known and not illustrated way under a sofa, armchair or the like, and it includes a rectangular-shaped structure S (figure 1), defined by a pair CL of rod-like side members L1 and L2 parallel to each other and by a pair CP of plan plates D1 and D2 transversally arranged in relation to the mentioned side members L1 and L2.

[0006] A T-shaped transversal element is sliding moving arranged between the two mentioned side members L1 and L2 along a cylindric guide CG parallel to the same side members L1 and L2 under the thrust of an actuator cylinder K with an electric driven piston, preferably but not limited to a gas piston, to move the mentioned transversal T-shaped element from a first position P1 (figure 1) to a second position P2 (figure 2) and vice versa.

[0007] According to what better illustrated in the figures 2 and 3, the T-shaped element further includes a pair CP of arms B1 and

[0008] B2, fixed to opposing ends of the same T-shaped element, each arm B1, B2 supporting centred in an own end a rod M1, M2, substantially at L.

[0009] Each rod M1, M2 in turn supports centred at an own free end a supporting plate Z1, Z2, in such a way that between the same plates Z1 and Z2 is possible to fix a panel J (figures 2 and 3) being able, in use, to support the legs (particularly, the rear portions or calves) or the feet of a user of the sofa, armchair or the like.

Claims

1. Moving mechanism (M), **characterized in that** it includes a rectangular-shaped structure (S) defined by side members means (CL, L1, L2) parallel to each other and plate-like means (CP, D1, D2) transversally arranged in relation to said side members (L1, L2); a transversal element (T) being arranged between said side members means (CL, L1, L2), and sliding movable along a cylindrical guide (CG) parallel to the side members means (C1, L1, L2) from a first position (P1) to a second position (P2); said transversal element (T) including arm-like means (CB, B1, B2) fixed to opposing end of said transversal element (T) to support centred rod-like means (M1, M2) and plate-like means (Z1, Z2) centred in relation to said rod-like means (M1, M2).

2. Mechanism according to claim 1, **characterized in that** it furthermore includes piston driven actuator cylinder means (K) to move said transversal element (T) between said first position (P1) and second position (P2).

3. Mechanism according to claim 2, **characterized in that** said actuator cylinder means (K) are electrically driven.

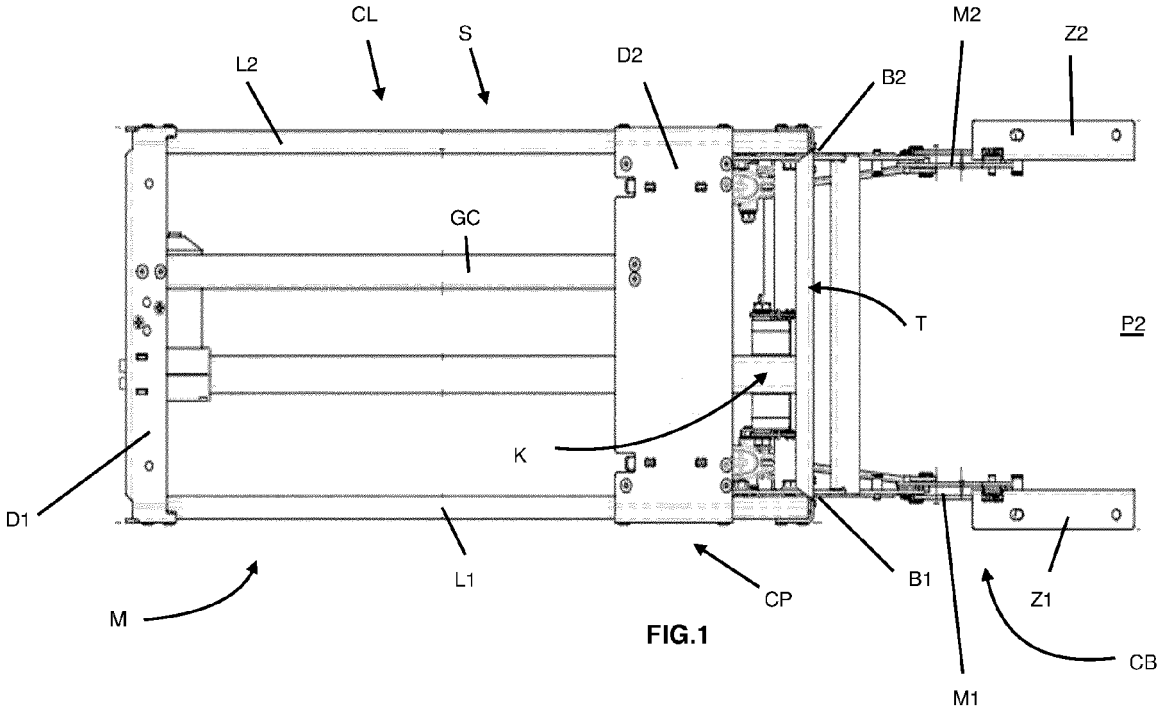

FIG.1

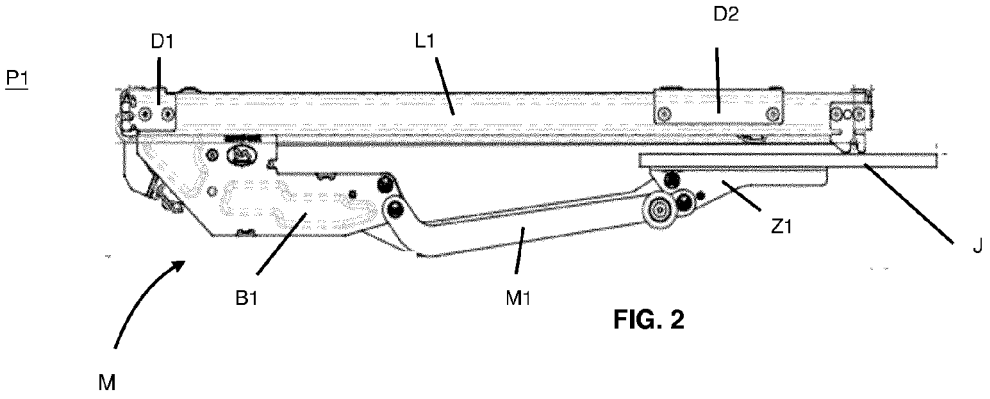

FIG. 2

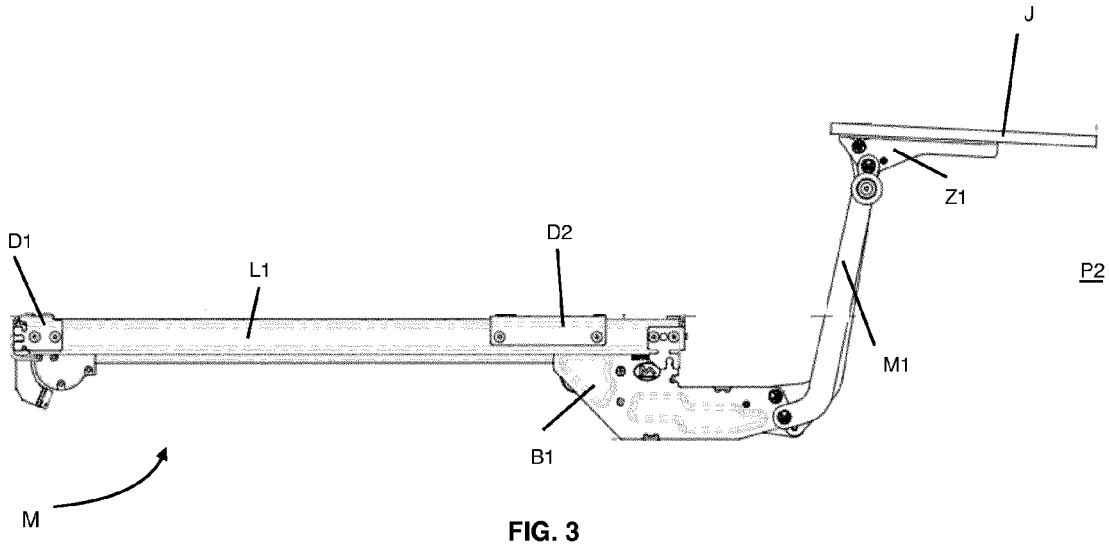

FIG. 3

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EUROPEAN SEARCH REPORT

Application Number
EP 22 19 2665

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	DE 20 2020 106606 U1 (KEMMANN & KOCH GMBH & CO KG [DE]) 9 December 2020 (2020-12-09) * paragraphs [0025], [0028]; figures *	1-3	INV. A47C7/50
X	DE 20 2021 103365 U1 (CIAR SPA [IT]) 28 June 2021 (2021-06-28) * paragraph [0018]; figures *	1-3	

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	3 March 2023	Kis, Pál

CATEGORY OF CITED DOCUMENTS

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E : earlier patent document, but published on, or after the filing date
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EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 22 19 2665

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03-03-2023

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 202020106606 U1	09-12-2020	NONE	
DE 202021103365 U1	28-06-2021	NONE	

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