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(54) **Central stand for supporting and adjusting the inclination of chairs with oscillating seat.**

(57) This invention concerns the central stand for supporting and adjusting the inclination of the seat-back group in chairs with an oscillating seat. The stand is composed of a block (10,10') and a pack of sheets (11,11') integrally united to said block.

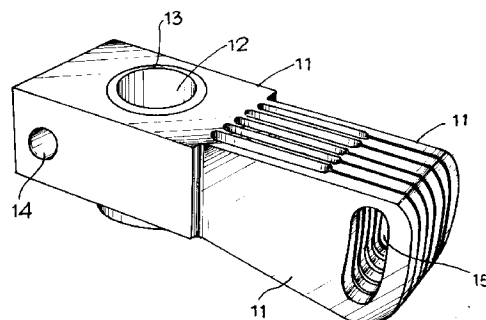


Fig. 1

The present invention relates generally to chairs and armchairs with an oscillating seat, and more particularly to a central stand for supporting and adjusting the inclination of the seat in said chairs and armchairs.

In some chairs and armchairs for office, the seat means formed of seat and back is usually oscillatingly assembled on a central immovable support. Said central stand is applied to the top of a base or post, in case adjustable in height, and besides supporting the oscillating seat, it is provided with a plurality of parallel sheets interacting with a stopping-releasing pivot which passes through them to adjust and stabilize as one wishes the seat inclination by means of a hand lever.

In accordance with the known embodiments, the stand and the parallel sheets are made of independent and originally separated elements. In fact the stand is composed of a body or block and the sheets are then joined to said body or block by welding or by means of pivots, pins or like.

On the contrary, it is an object of the present invention to provide a central stand for chairs with a new and original shape which allows a more convenient and cheap realization and an easier and simpler arrangement for the assembling operations.

Another object of the invention is to provide a central stand for oscillating seats made of one element only, advantageously realizable in plastic material and not requiring welding work or junction by welding or with pivots, pins or like.

Said objects and advantages are obtained with a central stand essentially as claimed in claim 1.

However, further details concerning the invention will result clear from the following description made with reference to an embodiment illustrated in the enclosed drawings. In said drawings :

Fig.1 shows a perspective view of the central stand;

Fig.2 shows a view from above of the group supporting seat and back and embodying the stand shown in Fig.1 in connection with a similar stand for the back;

Fig.3 shows a cross section view as indicated by the arrows III-III in Fig.2; and

Fig.4 shows a view of a modified form of the stand in Fig.1.

The central stand is composed of a block 10 and a plurality of parallel sheets 11 integrally joined to block 10, the whole in plastic material.

Block 10 has a tapered hole 12, where in case a bush 13 may be inserted, and a transverse hole 14 in a right-angled plant to the tapered hole. The sheets 11 have, in a transverse direction, an arched slot 15 concentric to the transverse hole 14.

On such a depicted stand, a seat-carrying oscillating plate 16 is mounted, in the rear part of which a stand 18 for a back is hinged at 17. More precisely,

the described central stand is mounted on a base or supporting post 19, in case adjustable for height, whose top is tapered and inserted in the tapered hole 12 of the block 10 - see Fig.3. The seat-carrying plate 16 is applied to the block 10 by means of a pivot 20, inserted in the transverse hole 14 of the block and constituting the oscillating axe of the seat.

A stopping-releasing device 21 actuated by a hand lever 21a is mounted on the seat-carrying plate 16 for locking/unlocking the sheets 11. Such device, which is already known in the art, has a pivot or tie rod 22 which extends in the arched slot 15 of the sheets 11 and is engaged to the plate 16.

When the back support 18 is also oscillating as shown in the drawing, a second block 24 is hinged, at 23, to said back support 18, and also provided with a plurality of sheets 25 integral with it. Said sheets 25 are directed and inserted in the spaces among the sheets 11 of the central stand and have an oblong slot 26 where the pivot or tie rod 22 of the stopping-releasing device 20 extends.

Thus, the central stand, consisting of block 10 integral with the sheets 11, always remains fixed and immovable on the base or supporting post 19, while the seat-carrying plate 16 can oscillate on said central stand and the back relatively to the seat-carrying plate. However, said oscillations are possible when the device 20 set in action by the lever 21 is in the releasing position so as to let the sheets 11, 21 free.

On the contrary, seat and back can be stopped in the desired inclination by acting on the lever 21 in order to tighten and lock the sheets 11, 25 by means of the device 20.

Finally, in a particular realization the central stand, which is always provided with integral sheets 11', could have an oblong-shaped block 10' as shown in the Fig.4 of the drawing, in order to apply also a springy device 27 contrasting the seat oscillations.

Claims

1. A central stand for supporting and adjusting the inclination of chairs with an oscillating seat, said stand including a block with parallel sheets, the seat being oscillatingly hinged on said block and having a stopping-releasing device interacting with said sheets to stop the seat in any inclination, characterized in that the supporting block (10, 10') and the parallel sheets (11, 11') are integrally united.
2. Central stand as claimed in claim 1, wherein said block (10, 10') is provided with a tapered hole (12) for the application on a base or supporting post, and a transversal hole (14) for a pivot constituting the oscillating axe of the seat, and wherein said

sheets (11,11') have an arched slot (15) concentric to said transverse hole in which a pivot or tie rod of the stopping-releasing device extends.

3. Central stand as claimed in claims 1 and 2, wherein said sheets (11) are inserted in integral sheets (25) with a second block (24) hinged at the back stand when the back is oscillating, the first and second block of sheets (11,25) being stopped-released by the same device. 5 10
4. Stand as claimed in claim 1, also characterized in that said block (10') presents an expansion where a spring contrasting the seat oscillations is applied. 15

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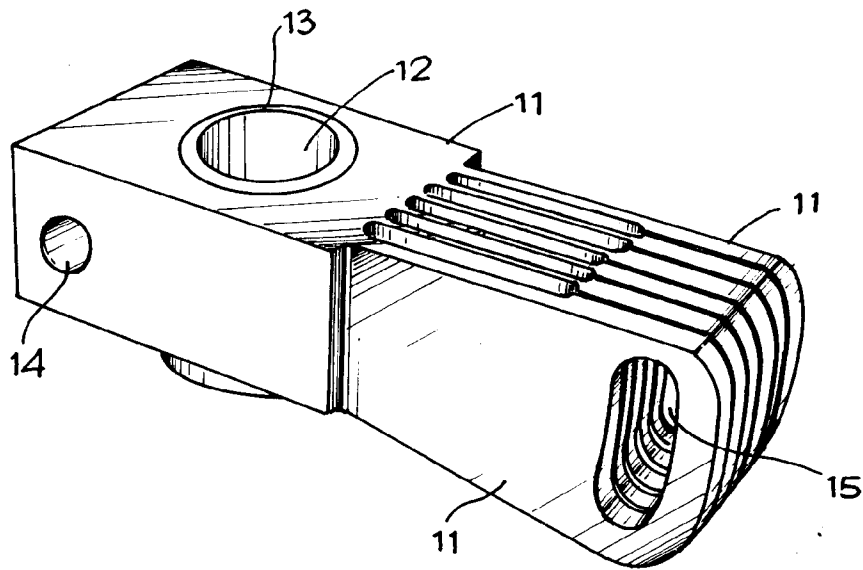


Fig. 1

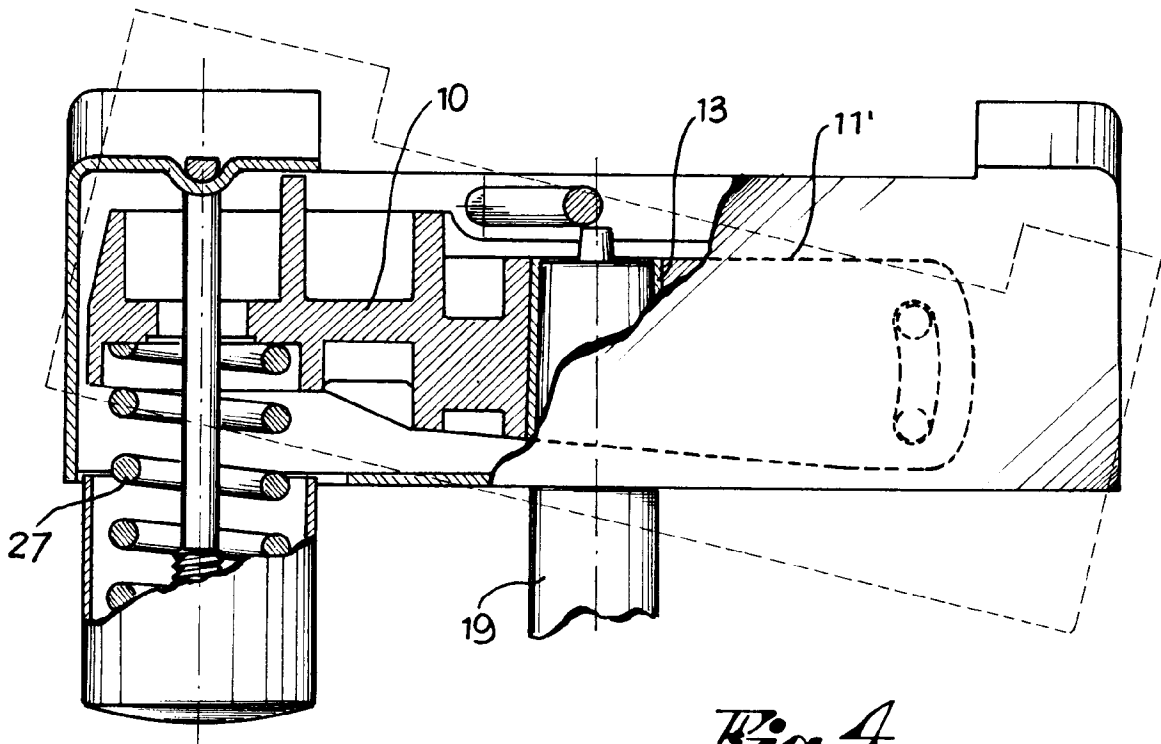
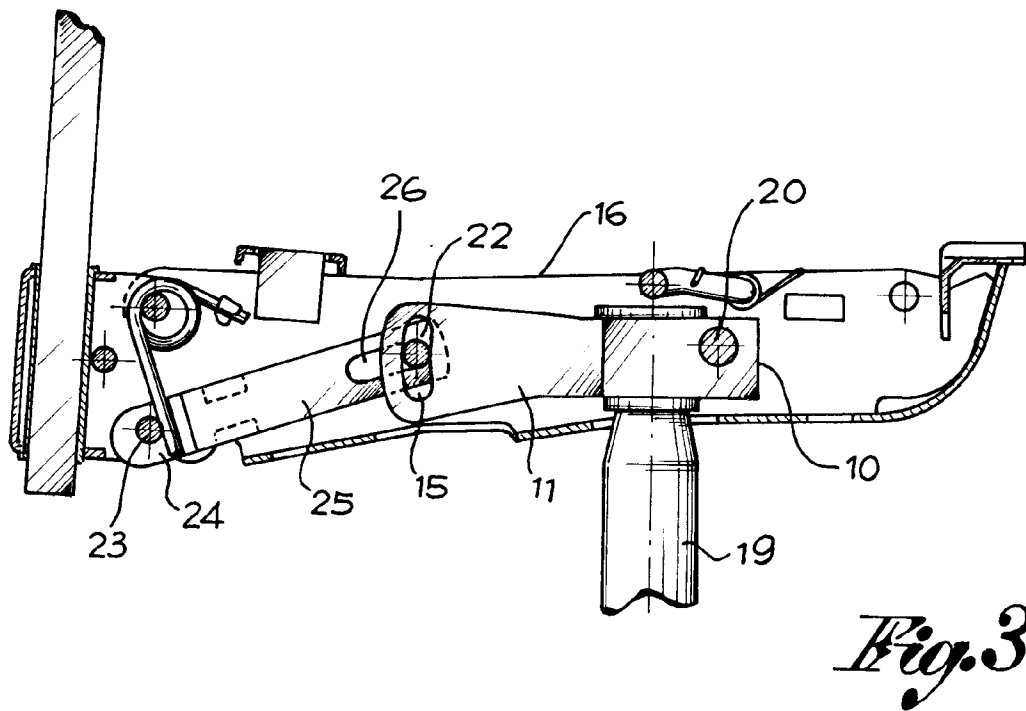
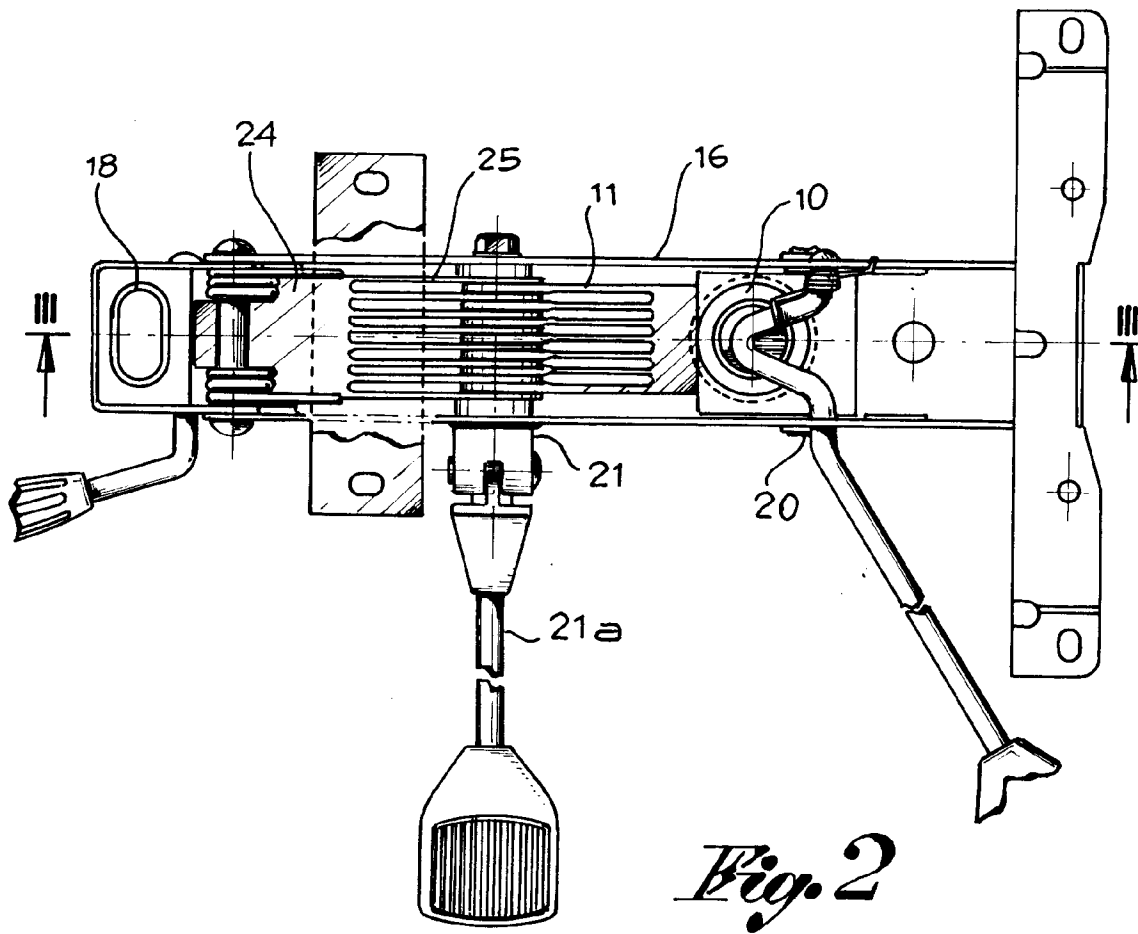


Fig. 4





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 92 83 0582

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	WO-A-8 600 508 (VÖLKLE) * claim 1; figures * ---	1-4	A47C1/027 A47C1/022
A	EP-A-0 394 784 (LINEAGER) * column 2, line 8 - column 5, line 1; figures * ---	1-4	
A	FR-A-2 312 216 (NEUMULLER) -----		
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			A47C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 24 MARCH 1993	Examiner VANDEVONDELE J.
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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