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(54) **Reclining support for backs of sofas or chairs**

Neigungsverstellbare Stütze für Rückenlehne eines Sofas oder Stuhls

Support inclinable pour dossier de canapé ou chaise

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Description

[0001] The present invention relates to a reclining support for backs, and in particular to a support which can be mounted onto reclining chairs or sofas.

[0002] Known reclining supports comprise upper and lower fixing members for fixing two portions of a back which can be reclined in a different and/or independent manner from each other. For this purpose, the fixing members are generally mounted onto a fixed support by means of horizontal pins, so that each portion of the back can be manually rotated by the user. However, these known supports have a poor comfort of use since they do not allow a smooth movement of all the portions of the back.

[0003] It is therefore an object of the present invention to provide a reclining support free from said disadvantage. Said object is achieved with a support, the main features of which are disclosed in the first claim and other features are disclosed in the subsequent claims.

[0004] Thanks to the articulated quadrilaterals made up of some fixing members, of the fixed supports and of the first and second levers, the support according to the present invention allows to rotate the two portions of the back with a smooth movement, especially if these articulated quadrilaterals are mutually connected by a horizontal shaft.

[0005] According to a particular aspect of the invention, the horizontal shaft can be connected to the fixed supports by pulling elastic means, so as to facilitate the transformation from the upright position of the back to the reclined position, and vice versa.

[0006] Further advantages and features of the support according to the present invention will become clear to those skilled in the art from the following detailed and non-limiting description of an embodiment thereof with reference to the attached drawings, wherein:

- figure 1 shows a side view of a reclining support in an upright position;
- figure 2 shows a front view of the support of figure 1;
- figure 3 shows a partial top view of the support of figure 1;
- figure 4 shows a side view of the support of figure 1 in a reclined position;
- figure 5 shows a front view of the support of figure 4; and
- figure 6 shows a partial top view of the support of figure 4.

[0007] Figures 1 to 3 show a reclining support 1, which comprises in a known way upper fixing members 2 and lower fixing members 3 which are provided with perforated plates for fixing two portions 4, 5 (partially shown with broken lines in figure 1) of a back.

[0008] According to the invention, the fixing members 2, 3 are pivoted to a horizontal shaft 6, in turn pivoted to a pair of fixed supports 7 through a pair of first levers 8

perpendicular to this shaft. The fixed supports 7 can be fixed to the structure of a chair or a sofa. A pair of second levers 9 are pivoted between the upper fixing members 2 and the fixed supports 7, while a pair of pulling elastic means, for example two springs 10, are fixed between the horizontal shaft 6 and the fixed supports 7, more precisely a pin 11 protruding inside each fixed support 7.

[0009] Referring also to figures 4 to 6, it is seen that at least one of the two portions 4, 5 of the back can be inclined by pushing or pulling this portion, for example the upper portion 4. The upper fixing members 2 thus rotate around the horizontal shaft 6, which is pushed forwards by the movement of a pair of articulated quadrilaterals made up of an upper fixing member 2, of a fixed support 7, of a first lever 8 and of a second lever 9. This reclining movement of the back is opposed by springs 10 up to the overcoming of a deadlock, beyond which it is instead assisted. Therefore, for restoring the back in the upright position, it is sufficient to push or pull portion 4 of the back up to overcome said deadlock, after which springs 10 pull the horizontal shaft 6, thereby restoring the reclining support 1 to its initial position.

Claims

1. Reclining support for backs (4, 5), which comprises upper fixing members (2) and lower fixing members (3) for fixing portions (4, 5) of a back, **characterized in that** some fixing members (2, 3) are pivoted to a horizontal shaft (6) which is in turn pivoted to fixed supports (7) through first levers (8) perpendicular to this shaft (6), second levers (9) being pivoted between some fixing members (2) and the fixed supports (7) for making up an articulated quadrilateral (2, 7, 8, 9).
2. Support according to the previous claim, **characterized in that** the second levers (9) are pivoted between the upper fixing members (2) and the fixed supports (7).
3. Support according to one of the previous claims, **characterized in that** both the upper fixing members (2) and the lower fixing members (3) are pivoted to the horizontal shaft (6).
4. Support according to one of the previous claims, **characterized in that** pulling elastic means (10) are fixed between the horizontal shaft (6) and the fixed supports (7).
5. Support according to the previous claim, **characterized in that** said pulling elastic means (10) comprise springs fixed between the horizontal shaft (6) and pins (11) protruding inside the fixed supports (7).

Patentansprüche

1. Neigungsverstellbare Stütze für Rückenlehnen (4, 5), die obere Befestigungsglieder (2) und untere Befestigungsglieder (3) zur Befestigung von Abschnitten (4, 5) einer Rückenlehne umfasst, **dadurch gekennzeichnet, dass** einige Befestigungsglieder (2, 3) um eine horizontale Welle (6) drehbar angelenkt sind, welche ihrerseits um feststehende Stützen (7) drehbar angelenkt ist über erste Hebel (8), die senkrecht zu der besagten Welle (6) angeordnet sind, und zweite Hebel (9), die zwischen einigen Befestigungsgliedern (2) und den feststehenden Stützen (7) drehbar angelenkt sind, so dass ein Gelenkviereck (2, 7, 8, 9) gebildet wird. 5
2. Stütze gemäß vorstehendem Anspruch, **dadurch gekennzeichnet, dass** die zweiten Hebel (9) zwischen den oberen Befestigungsgliedern (2) und den feststehenden Stützen (7) drehbar angelenkt sind. 10
3. Stütze gemäß einem der vorstehenden Ansprüche, **dadurch gekennzeichnet, dass** sowohl die oberen Befestigungsglieder (2) als auch die unteren Befestigungsglieder (3) um die horizontale Welle (6) drehbar angelenkt sind. 15
4. Stütze gemäß einem der vorstehenden Ansprüche, **dadurch gekennzeichnet, dass** zugelastische Mittel (10) zwischen der horizontalen Welle (6) und den feststehenden Stützen (7) befestigt sind. 20
5. Stütze gemäß vorstehendem Anspruch, **dadurch gekennzeichnet, dass** die genannten zugelastischen Mittel (10) Federn umfassen, die zwischen der horizontalen Welle (6) und Stiften (11), die von den feststehenden Stützen (7) nach innen herausragen, befestigt sind. 25

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Revendications

1. Support d'inclinaison pour des dossiers (4, 5), qui comporte des éléments de fixation supérieurs (2) et des éléments de fixation inférieurs (3) destinés à être fixés sur des parties (4, 5) d'un dossier, **caractérisé en ce que** certains éléments de fixation (2, 3) sont pivotés sur un arbre horizontal (6) qui est à son tour pivoté sur des supports fixes (7) à travers des premiers leviers (8) perpendiculaires à cet arbre (6), des seconds leviers (9) étant pivotés entre certains éléments de fixation (2) et les supports fixes (7) pour constituer un quadrilatère articulé (2, 7, 8, 9). 45
2. Support selon la revendication précédente, **caractérisé en ce que** les seconds leviers (9) sont pivotés entre les éléments de fixation supérieurs (2) et les supports fixes (7). 50

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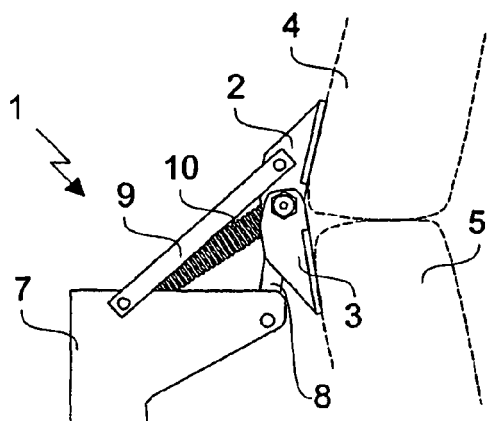


Fig. 1

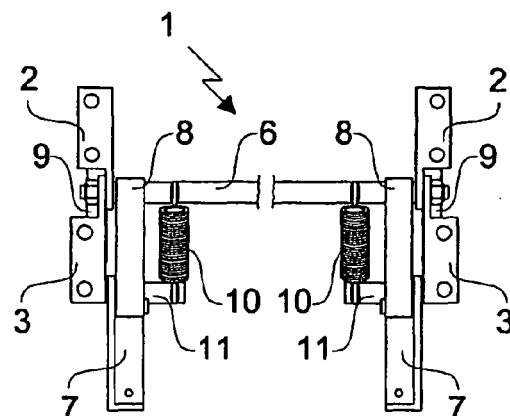


Fig. 2

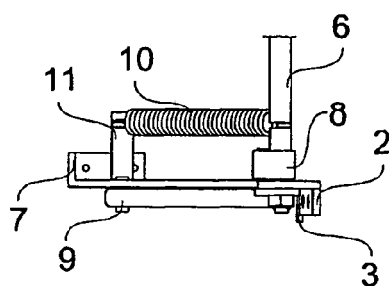


Fig. 3

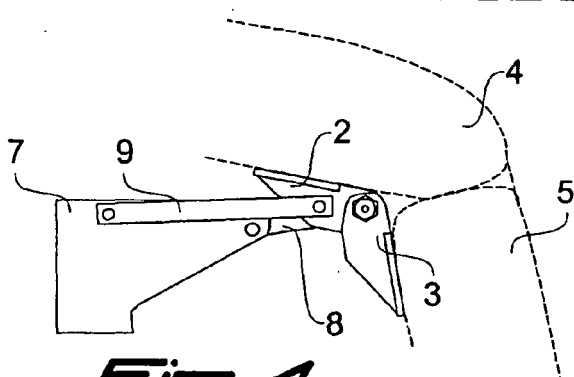


Fig. 4

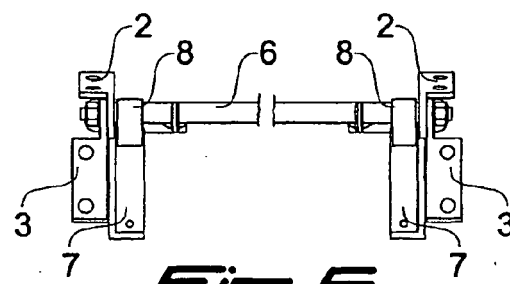


Fig. 5

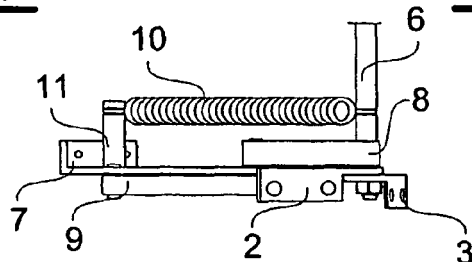


Fig. 6