US 20150196123A1

(19) **United States**

(12) **Patent Application Publication**

**Buehrer**

(10) **Pub. No.: US 2015/0196123 A1**

(43) **Pub. Date: Jul. 16, 2015**

(54) **SEAT DEVICE**

(71) Applicant: **EB-INVENT GMBH**, Altensteig-Walddorf (DE)

(72) Inventor: **Sabine Buehrer**, Filderstadt (DE)

(21) Appl. No.: **14/413,493**

(22) PCT Filed: **Jun. 25, 2013**

(86) PCT No.: **PCT/EP2013/063291**

§ 371 (c)(1),
(2) Date: **Jan. 8, 2015**

(30) **Foreign Application Priority Data**

Jul. 11, 2012 (DE) ..... 10 2012 212 121.8

**Publication Classification**

(51) **Int. Cl.**

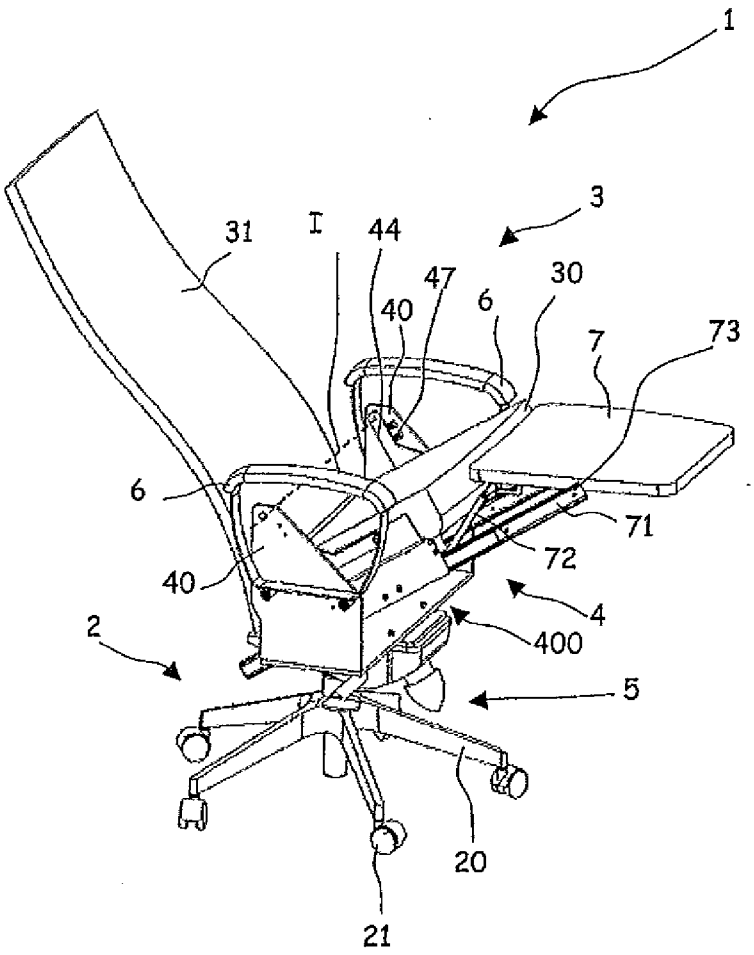
| | |
|---|---|
| ***A47C 1/032*** | (2006.01) |
| ***A47C 1/034*** | (2006.01) |
| ***A47C 7/54*** | (2006.01) |
| ***A47C 7/00*** | (2006.01) |
| ***A47C 7/50*** | (2006.01) |

(52) **U.S. Cl.**

CPC ..... ***A47C 1/032*** (2013.01); ***A47C 7/006*** (2013.01); ***A47C 7/004*** (2013.01); ***A47C 7/506*** (2013.01); ***A47C 7/54*** (2013.01); ***A47C 1/0342*** (2013.01)

(57) **ABSTRACT**

A desk chair device including a base frame with a pedestal and a chair structure with a seat and a backrest, wherein a pivot mechanism is provided, via which the chair structure is mounted on the base frame for pivoting movement about a horizontal pivot axis between a work position and a reclining position. The pivot axis is arranged with respect to the base frame in a fixed position above the seat approximately in the region of a center of gravity of the chair structure.



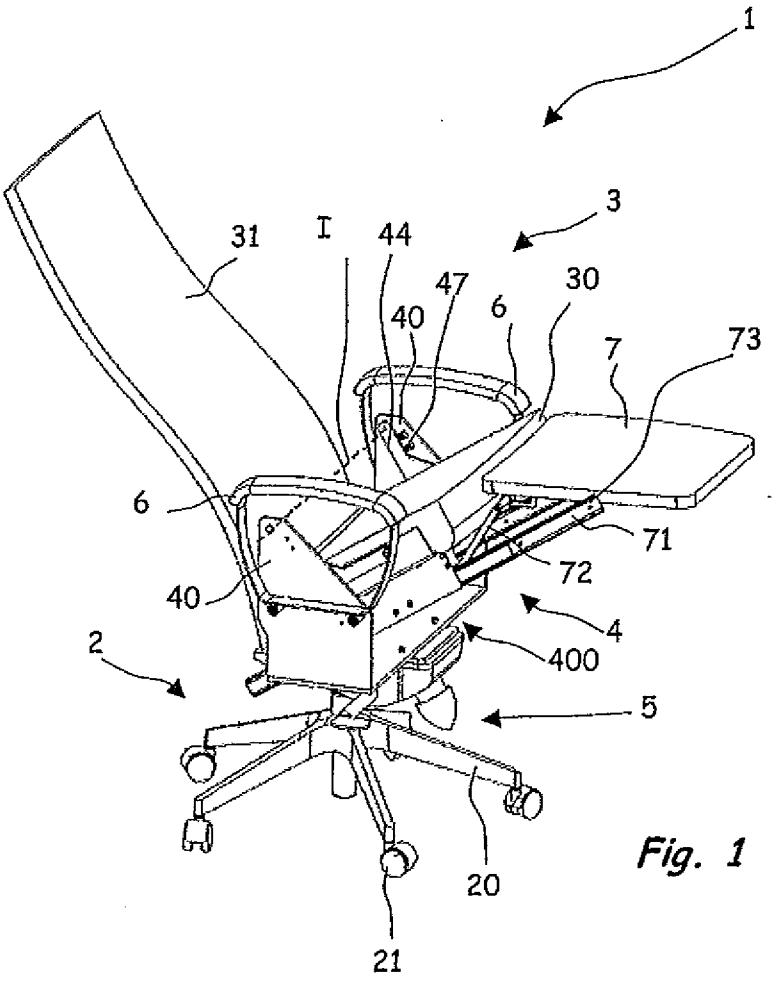

1
3
31
I
44
47
40
6
30
7
73
6
71
72
40
4
400
2
5
20
21

Fig. 1

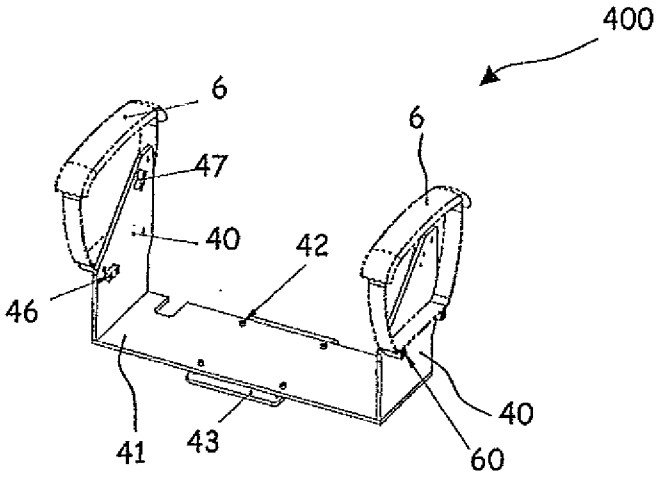

400
6
6
47
40
42
46
41
43
40
60

Fig. 2

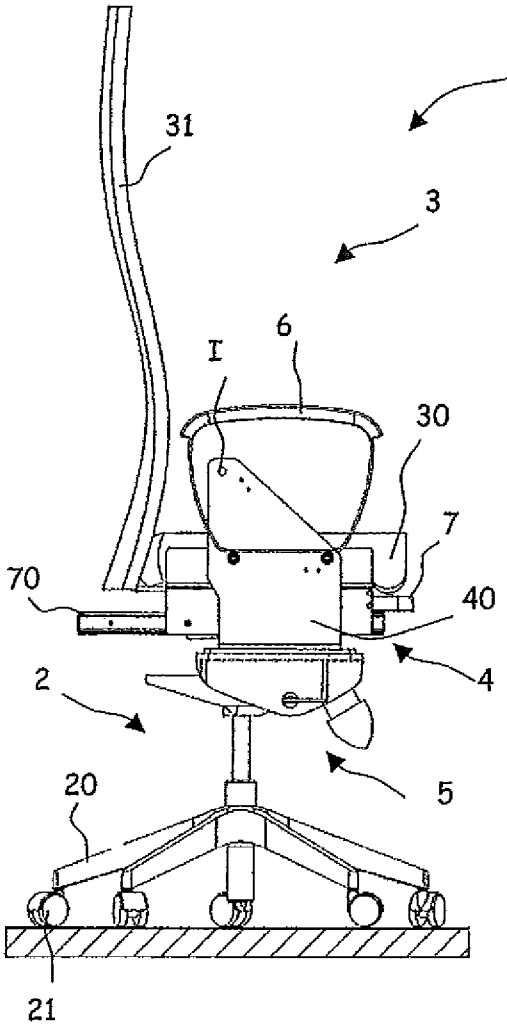



Fig. 3

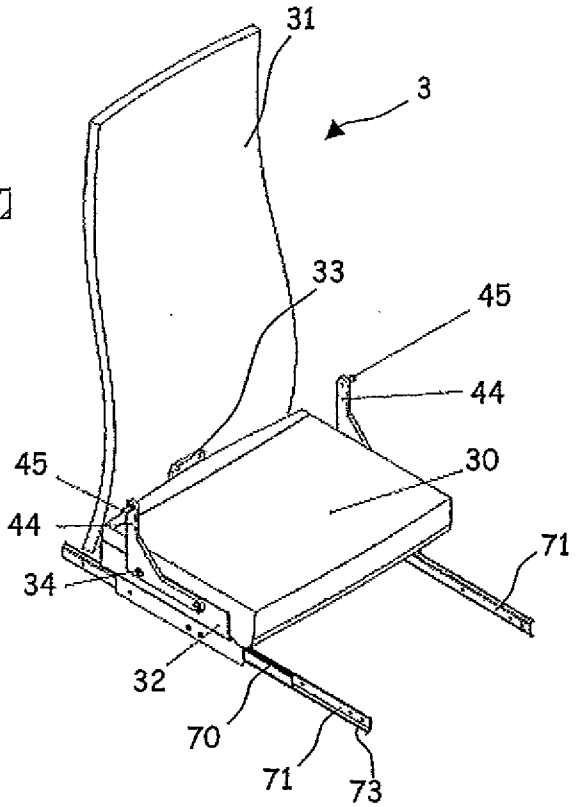



Fig. 4

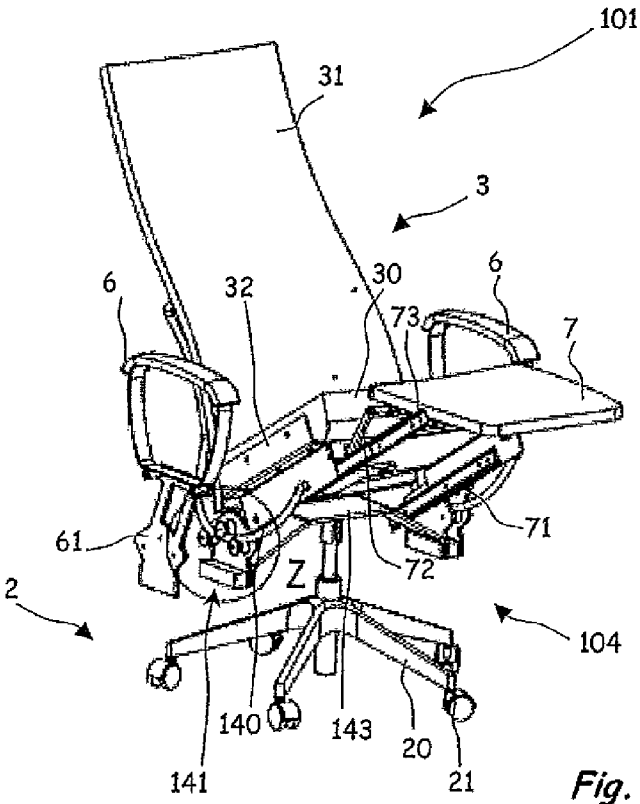



Fig. 5

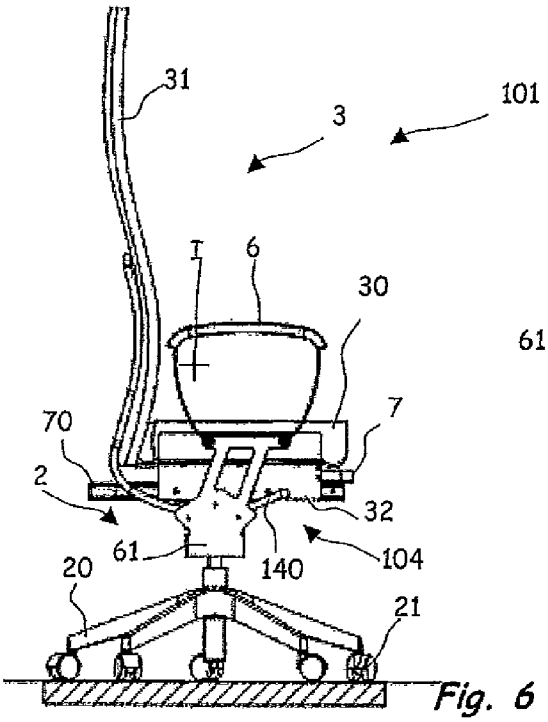



Fig. 6

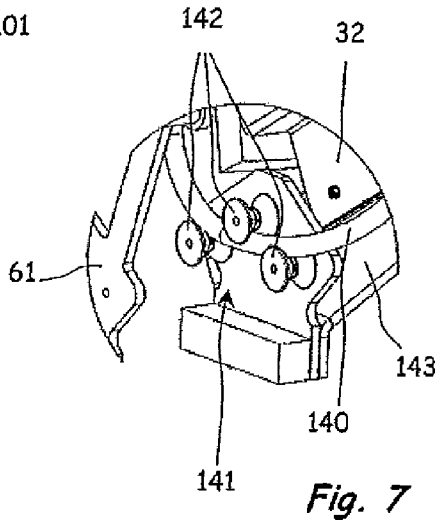



Fig. 7

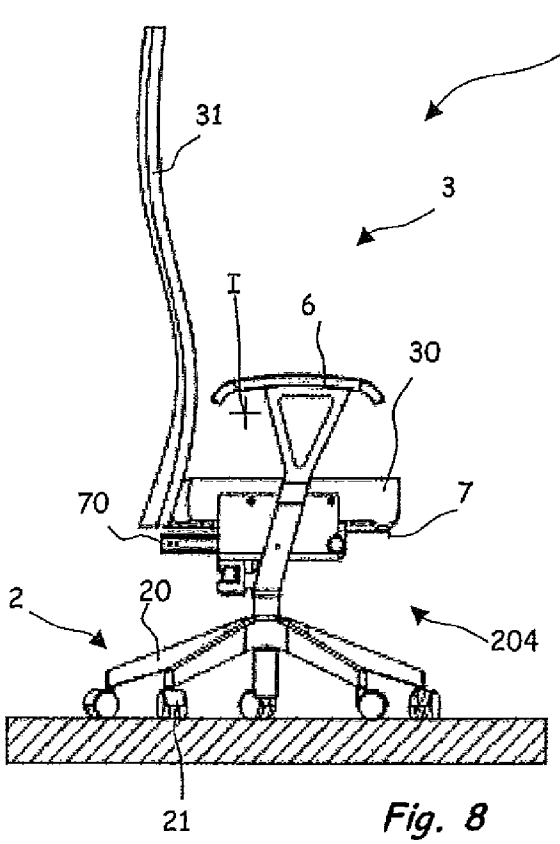



Fig. 8

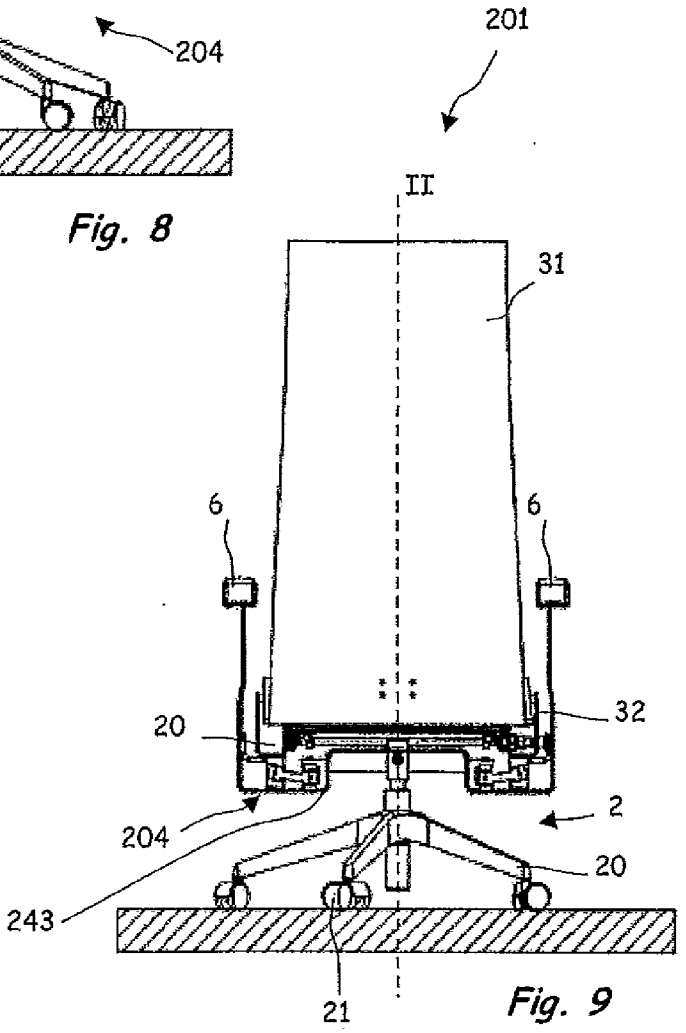



Fig. 9

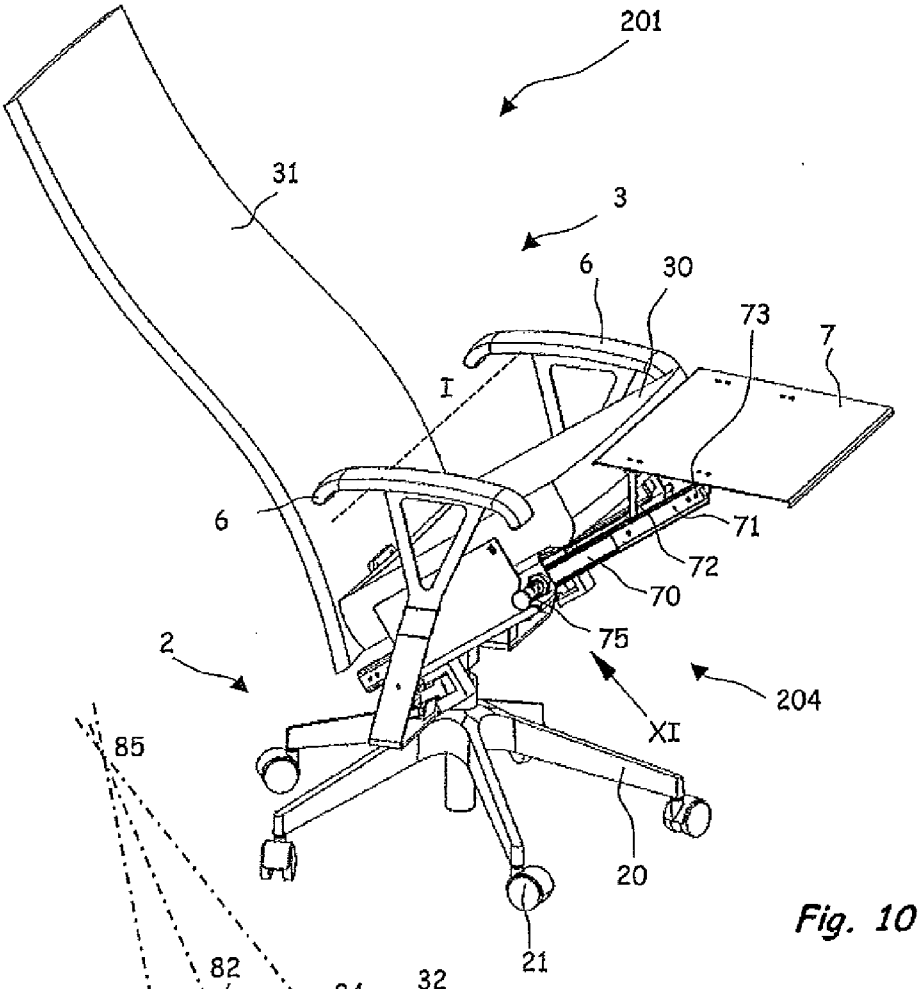

201
31
3
6
30
73
7
I
6
71
72
70
75
2
204
XI
85
20
21

Fig. 10

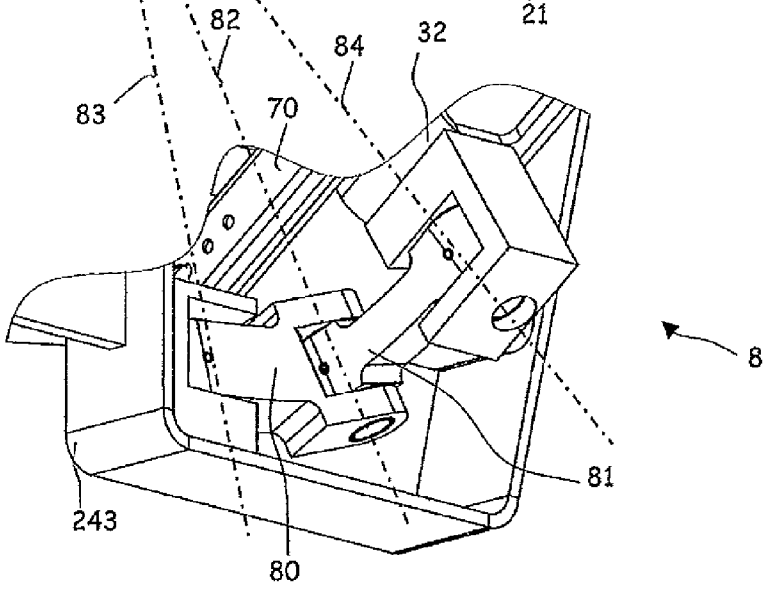

82
84
32
83
70
8
81
243
80

Fig. 11

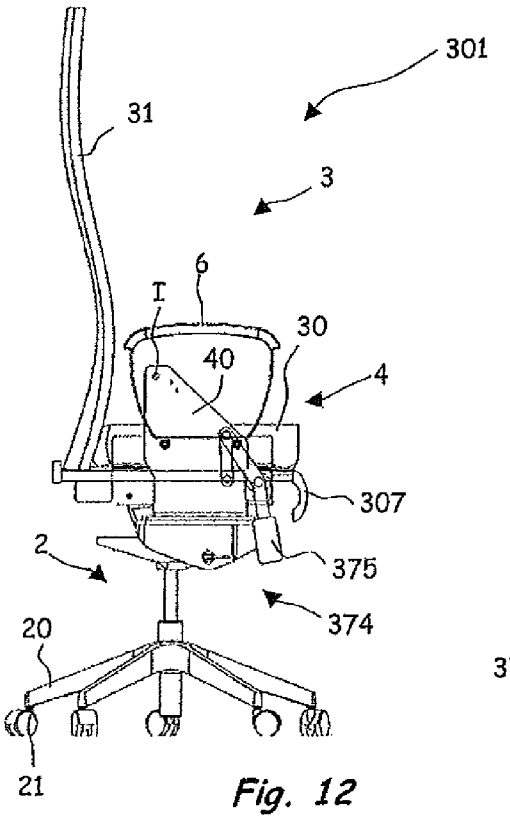



Fig. 12

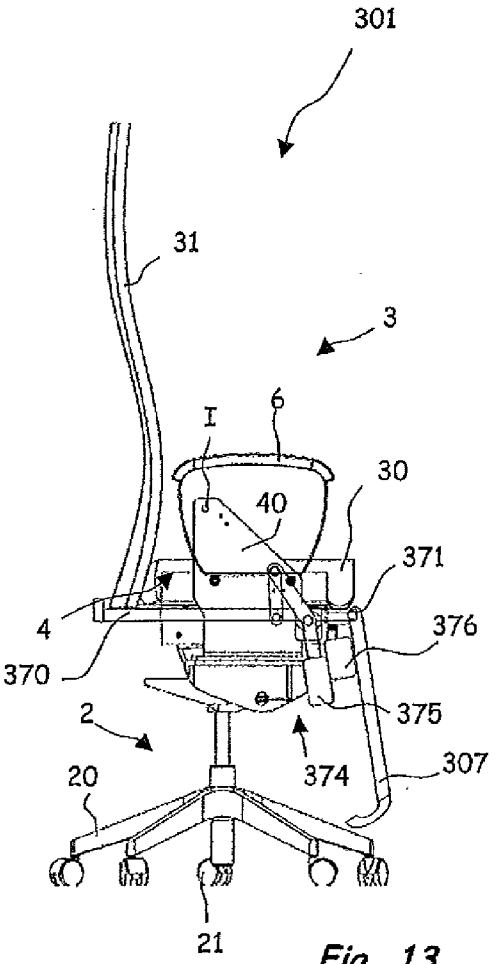



Fig. 13

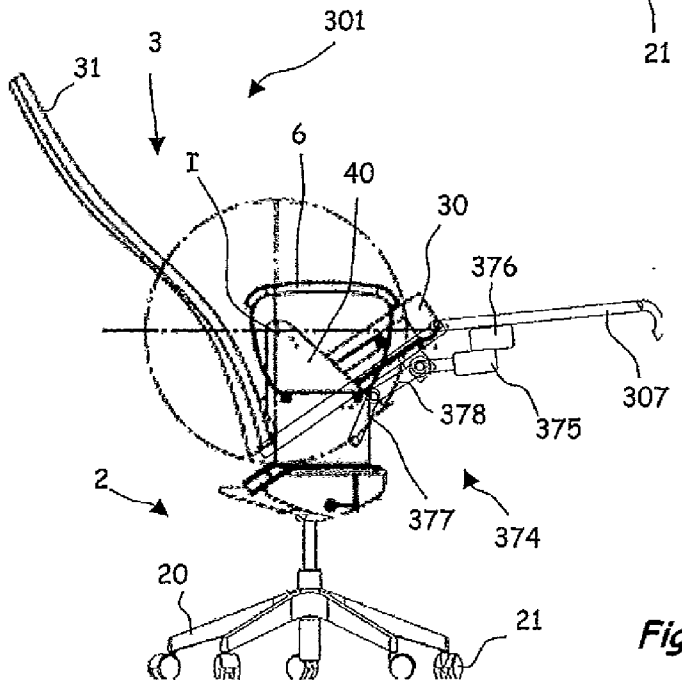



Fig. 14

# SEAT DEVICE

**[0001]** The invention relates to a desk chair device comprising a base frame with a pedestal and a chair structure with a seat and a backrest.

**[0002]** In the context of the application, the term desk chair devices refers to chair devices in which a height of the seat, dimensions and the like are optimized to use at a desk. In the context of the application, such desk chair devices are also termed office work chairs or simply office chairs. Requirements for such chair devices are laid down for example in DIN EN 1335.

**[0003]** In recent years, numerous scientific studies have cemented the recognition that the productivity of a worker having a long working day can be substantially increased by means of a short sleep, often referred to as a nap or a power nap. It is thus known to provide so-called nap rooms in an office. Also known are devices by means of which a desk or an office chair can be converted to a reclining device for a short sleep. However, such a conversion is generally associated with great effort, such that the high conversion effort runs counter to the aim of permitting a short sleep for the worker in a short break.

**[0004]** The invention therefore has the object of providing a desk chair device which permits use in a reclining position without this requiring a high conversion effort.

**[0005]** This object is achieved by means of a desk chair device comprising a base frame with a pedestal and a chair structure with a seat and a backrest, wherein a pivot mechanism is provided, by means of which the chair structure is mounted on the base frame such that it can be made to pivot, about a horizontal pivot axis, between a work position and a reclining position, and wherein the pivot axis is arranged with respect to the base frame in a fixed position above the seat at least approximately in the region of a center of gravity of the chair structure together with a person using the chair structure as intended.

**[0006]** In the work position, the chair device can be used without restrictions at a desk. A pivoting movement is possible at least between the work position and the reclining position. In that context, in one embodiment, pivoting into any intermediate position is also possible. By virtue of the fact that the pivot axis is arranged at the center of gravity, no moments due to gravity act on the chair structure. The position of the chair structure is thus stable in every pivot position of the chair structure about the pivot axis, also termed inclination position. It is thus possible to omit elaborate securing mechanisms. In one embodiment, however, additional securing mechanisms are provided for securing the chair structure in a desired inclination position.

**[0007]** It is possible to effect a pivoting movement of the chair structure with little effort, for example by bearing on an armrest of the chair device. In one embodiment, therefore, the pivoting movement is initiated and executed manually by a user. In another embodiment, at least one drive and/or a brake is provided, in order to pivot the chair structure and/or arrest the latter in a certain position. In advantageous embodiments, a pivot position beyond the maximum positions, i.e. beyond the work position and/or beyond the reclining position, is prevented by endstops. The fact that the pivot axis is arranged above the seat reliably prevents the chair structure from tipping over even in the event of the brakes failing and/or without limitation. Since the center of gravity of the chair structure—where relevant with a person using the chair structure as intended—remains at an at least approximately fixed position during a pivoting movement, there is also no danger of the chair device tipping about a setup point of the pedestal during pivoting.

**[0008]** The pivoting movement about the pivot axis which lies at least approximately at the center of gravity also produces, during a pivoting movement, a feeling of relaxation in a person using the chair device.

**[0009]** In one embodiment, the pedestal comprises casters by means of which the chair device can be moved around. It is further provided, in one embodiment, that the chair structure and the base frame are connected in a height-adjustable manner, for example by means of a gas spring device. Since, during a pivoting movement between the work position and the reclining position, the pivot axis is not displaced relative to the base frame, the pivot axis is referred to as positionally fixed, in spite of the fact that the height of the chair structure can be adjusted relative to the base frame. In a further embodiment, a rocker mechanism, for dynamic seating in the work position, is provided between the chair device and the base frame.

**[0010]** The center of gravity of the chair structure, where relevant together with a person using the chair structure as intended, is approximately identical for a multiplicity of possible users depending on the weight of the seat and/or backrest and therefore the influence thereof on the position of the center of gravity. In one embodiment, balancing weights are provided in order to make it possible to adapt to various people.

**[0011]** In one embodiment, it is provided that the chair structure comprises a chair structure support. The chair structure support serves as a retaining device for the seat and the backrest. In that context, in one advantageous embodiment, the seat and/or the backrest is/are mounted such that it/they can be adjusted relative to the pivot axis and attached to the chair structure support in at least two different positions. By virtue of the adjustability of the seat and/or of the backrest, relative to the pivot axis, it is possible to adjust the chair device for a specific use by moving the center of gravity into the pivot axis.

**[0012]** In a further embodiment, it is provided that the seat and the backrest are connected in order to transfer a displacement movement of the backrest to the seat. In that context, in one embodiment the seat and the backrest are rigidly connected to one another. A "rigid connection" refers to a mechanical connection in which the components ideally do not move relative to one another. In other embodiments, the seat and the backrest are connected elastically, such that a relative movement between the seat and the backrest is possible over a small, definable angular range. A balancing movement is thus possible for example when using the chair device in a work position. In a further embodiment, it is provided that, at least when pivoting the chair structure about the pivot axis, the seat and the backrest are rigidly connected in order to prevent a relative movement between the seat and the backrest when pivoting about the pivot axis, and thus to prevent displacement of the center of gravity during pivoting. In that context, the rigid connection is, in one embodiment, effected automatically, by a suitable device, during the pivoting movement about the pivot axis. In other embodiments, it is provided that the parts are connected manually by a user. In that context, it is provided in one embodiment that a pivoting movement about the pivot axis is permitted only once the parts are rigidly connected.

**[0013]** In one embodiment of the desk chair device, the pivot mechanism comprises two support elements which are assigned to the base frame and are arranged at the side of the chair structure, and two cranks which are assigned to the chair structure and are mounted on the support elements such that they can be made to pivot. In the context of the application, "assigned to the chair structure" refers both to a mechanical connection between the cranks and the parts of the chair structure, in particular the chair structure support, and to an embodiment of the cranks in one piece with parts of the chair structure, in particular with the chair structure support. In one embodiment, two lateral armrests assigned to the base frame are provided, wherein the armrests act as support elements to which the cranks are pivotably articulated.

**[0014]** In another embodiment of the desk chair device, the pivot mechanism comprises at least two curved guides which are arranged concentrically. Depending on the desired pivot angle, at least two concentrically arranged, closed circular guides or open curved guides, in the following incorporated under the term curved guides, are provided. The curved guides are mounted displaceably on rollers or in counterstays, such that the chair structure carries out a pivoting movement about the axis defined by the two central points. In advantageous embodiments, it is provided in that context that the two curved guides are assigned to the chair structure and are mounted displaceably in a counterstay assigned to the base frame. In one embodiment, a profile of the bending line of the two curved guides is optimized for a pivoting movement. To that end, the two curved guides are configured, in one embodiment, as circular-arcuate guides. In another embodiment, the curved guides have a bending line which deviates in sections from a circular path. By means of an appropriate choice of the bending line, in one embodiment a required force at the beginning of a pivoting movement out of the work position and/or out of the reclining position is increased. Alternatively or in addition, by means of an appropriate choice of the bending line, it is provided in another embodiment that the chair structure is forced into the work position and/or into the reclining position without an external input of force. The suitable profile of the bending line can be easily chosen by one skilled in the art, wherein the center of gravity remains at least approximately positionally fixed.

**[0015]** In yet another embodiment of the desk chair device, the pivot mechanism comprises two articulation devices, each of which has at least one upper arm and one lower arm which is articulated to the upper arm such that it can be made to rotate about an arm axis, wherein the upper arm is articulated to the base frame such that it can be made to rotate about a base axis, the lower arm is articulated to the chair structure such that it can be made to rotate about an end axis, the base axis, the arm axis and the end axis of each articulation device intersect with each other in each case at a central point and the line connecting the central points defines the pivot axis. In one embodiment, further arms, which can be made to rotate about further arm axes which pass through the central point, are provided, wherein the lower arm is not directly or immediately articulated to the chair structure, rather the chair structure is mounted between the two latter arms of the two articulation devices, such that it can be made to rotate about the two end axes thereof. Such a pivot mechanism makes it possible to pivot about a pivot axis which is not physically created. The pivot mechanism is arranged offset with respect to the pivot axis. In advantageous embodiments, the pivot mechanism is arranged, in a space-saving manner, below the seat without this causing any limitation on use in the work position. It is in addition possible to achieve a design of the chair structure which is not compelled by the pivot mechanism.

**[0016]** In one development, the two articulation devices are constructed symmetrically with respect to the plane of symmetry between the two central points. This is advantageous because of the simplicity of storage and construction during assembly and maintenance, but it is not necessary. However, in advantageous embodiments it is at least provided that the end axes run in a common normal plane to the pivot axis and/or that the base axes lie in a common plane.

**[0017]** In a further embodiment of the desk chair device, the chair structure comprises a legrest which can be displaced between a use position and a stowed position. The leg- or footrest can be used to support the lower legs and/or the feet when in a reclining position. In the use position, the legrest is, in one embodiment, coplanar with the seat. In another embodiment, the legrest is at an angle to the seat when in the use position. In one embodiment, the legrest is coupled to the pivot mechanism of the chair structure such that, when the chair structure is made to pivot into the reclining position, the legrest is moved into the use position. In other embodiments, the displacement movements of the chair structure and of the legrest are not coupled, such that for example the legrest can be brought into a use position also in the work position.

**[0018]** In one development, it is provided that the legrest is articulated to the chair structure such that it can be made to pivot. In that context, in one embodiment, the legrest is articulated such that it can be made to pivot about an axis arranged at a forward end of the seat. In that context, in one embodiment, pivoting is effected by means of a folding mechanism with a stopper element which projects downwards from the seat and which, when the chair structure is in a reclining position, holds the legrest in a use position, counter to the force of gravity.

**[0019]** In an alternative embodiment, the legrest is mounted such that it can be pushed and folded into a drawer. In that context, in one embodiment, the legrest is acted on by an urging force which folds the legrest out when it is pulled out of the drawer.

**[0020]** Further advantages of the invention can be found in the subclaims and in the following description of exemplary embodiments of the invention, which are represented schematically in the drawings. In the drawings, consistent reference signs are used for identical or similar components. Features described or represented as part of an exemplary embodiment may also be used in another exemplary embodiment in order to obtain a further embodiment of the invention.

**[0021]** In the Drawings:

**[0022]** FIG. **1** is a perspective representation of a desk chair device according to a first exemplary embodiment;

**[0023]** FIG. **2** is a perspective representation of a support structure of the desk chair device according to FIG. **1**;

**[0024]** FIG. **3** is a side view of the desk chair device according to FIG. **1**;

**[0025]** FIG. **4** is a perspective representation of a chair structure of the desk chair device according to FIG. **1** with two cranks;

**[0026]** FIG. **5** is a perspective representation of a desk chair device according to a second exemplary embodiment;

**[0027]** FIG. **6** is a side view of the desk chair device according to FIG. **5**;

**[0028]** FIG. **7** shows a detail Z of the side view of the desk chair device according to FIG. **5**;

**[0029]** FIG. **8** is a side view of a desk chair device according to a third exemplary embodiment;

**[0030]** FIG. **9** is a rear view of the desk chair device according to FIG. **8**;

**[0031]** FIG. **10** is a perspective representation of the desk chair device according to FIG. **8**;

**[0032]** FIG. **11** shows a detail XI of the desk chair device according to FIG. **10**;

**[0033]** FIG. **12** is a side view of a desk chair device according to a fourth exemplary embodiment, in a work position;

**[0034]** FIG. **13** is a side view of the desk chair device according to FIG. **12** after a legrest has been pulled out and

**[0035]** FIG. **14** is a side view of the desk chair device according to FIG. **12**, in a reclining position.

**[0036]** FIGS. **1** and **3** show, schematically, a desk chair device **1** according to a first exemplary embodiment in a perspective representation and, respectively, a side view. FIGS. **2** and **4** show parts of the desk chair device **1** according to the first exemplary embodiment.

**[0037]** FIGS. **5** and **6** show a perspective representation and, respectively, a side view of a desk chair device **101** according to a second exemplary embodiment. FIG. **7** shows a detail Z according to FIG. **5**.

**[0038]** FIGS. **8** to **10** show, schematically, a desk chair device **201** according to a third exemplary embodiment in a side view, a rear view and, respectively, a perspective representation. FIG. **11** shows a detail XI of the desk chair device **201** according to FIGS. **8** to **10**.

**[0039]** FIGS. **12** to **13** show, schematically, a desk chair device **301** according to a fourth exemplary embodiment, in three side views.

**[0040]** The desk chair devices **1**, **101**, **201**, **301** have partially identical or similar components. For these components, consistent reference signs are used. In the following, these components are first described.

**[0041]** The desk chair devices **1**, **101**, **201** each comprise a base frame **2** with a pedestal **20** and a chair structure **3** with a seat **30** and a backrest **31**. Casters **21** are provided on the pedestal **20** in the exemplary embodiments represented.

**[0042]** The desk chair devices **1**, **101**, **201** further comprise in each case a pivot mechanism **4**, **104**, **204**, by means of which the chair structure **3** is mounted such that it can be made to pivot, about a horizontal pivot axis I, between a work position, represented in FIGS. **3**, **6**, **8** and **9**, and a reclining position, represented in FIGS. **1**, **5** and **10**. The pivot axis I is in each case arranged in a fixed position above the seat **30** with reference to the base frame **2**, wherein a position of the pivot axis I is chosen such that the pivot axis I is arranged at least approximately in the region of a center of gravity of the chair structure **3** together with a person (not shown) using the chair structure **3** as intended.

**[0043]** In the exemplary embodiments represented, the chair structure **3** in each case comprises a chair structure support **32**, to which the seat **30** is attached. In the exemplary embodiments represented, the backrest **31** and the seat **30** are rigidly connected to each other by means of an angle **33**. In one embodiment, the seat **30** is mounted adjustably on the chair structure support **32**. It is thereby possible to displace a center of gravity of the chair structure **3** relative to the pivot axis I, taking into account a person using the chair structure, such that the center of gravity comes to lie in the pivot axis I. In the exemplary embodiment shown, the seat **30** and the backrest **31** are rigidly connected to the chair structure support **32**.

**[0044]** The desk chair devices **1**, **101**, **201** represented in FIGS. **1** to **11** further comprise in each case a legrest **7** on which, in the reclining position as shown in FIGS. **1**, **5** and **10**, the lower legs or the feet of a user (not shown) can rest. In the work position—as shown for example in FIG. **3**, **6** or **8**—the legrest **7** is stowed in a position below the seat **30**. The legrest **7** is mounted such that it can be displaced relative to the seat **30**, by means of two guide rail pairs **70**, **71**, in a plane arranged at least approximately parallel to the seat. In that context, in each case one guide rail **70** is attached to the chair structure support **32**. The legrest **7** is pivotably articulated at one end of the second guide rail **71**, which can be displaced relative to the first. A displacement mechanism for the legrest **7** further comprises a lever **72** on which an urging force can be applied by means of an element not shown in the figures. When extending the guide rails **71**, the urging force causes the legrest **7** to be pivoted into the angled position with respect to the seat **30**, as represented in FIG. **1**, about the pivot axis **73**.

**[0045]** The desk chair device **301** represented in FIGS. **12** to **14** also comprises a legrest **307** on which, in the reclining position as shown in FIG. **13**, the lower legs or the feet of a user (not shown) can rest. In the work position—as shown in FIG. **12**—the legrest **307** is also stowed in a position below the seat **30**. As shown in FIG. **13**, the legrest **307** can be pulled out from the stowed position in order to be used. The legrest **307** is mounted such that it can be displaced, by means of a peg **371** in a guide rail **370** attached to the chair structure support **32**, and can be made to pivot about the peg **371** when in the pulled-out position. The legrest **307** is further assigned to a folding mechanism **374**. The folding mechanism **374** comprises a stopper element **375** which projects downwards from the seat **30** and which interacts with an endstop **376** arranged on the rear side of the legrest **307**. When the chair structure **3** is made to pivot, the stopper element **375** is extended by means of two levers **377**, **378** such that the legrest **307** pivots about the peg **371**.

**[0046]** The pivot mechanisms **4**, **104**, **204** provided in the four exemplary embodiments are described below.

**[0047]** According to the first exemplary embodiment represented in FIGS. **1** to **4**, and the fourth exemplary embodiment represented in FIGS. **12** to **14**, the pivot mechanism **4** comprises two support elements **40** which are assigned to the base frame **2** and are arranged at the side of the chair structure **3**, and which are formed in one piece as a U-shaped support structure **400**.

**[0048]** The support structure **400** is represented in detail in FIG. **2**. The U-shaped support structure **400** comprises a base **41**, and two legs which project from the base and act as support elements **40**. The support structure **400** is securely connected to the base frame by means of the base **41**, via screws **42** and a support plate **43**. In the exemplary embodiment according to FIGS. **1** to **4**, the support structure **400** is mounted in a height-adjustable manner with respect to the pedestal **20** by means of a known gas spring device **5**. In the exemplary embodiment, two armrests **6** are attached to the support structure **400** by means of screws **60**.

**[0049]** The pivot mechanism **4** further comprises two cranks **44** which are assigned to the chair structure **3** represented in detail in FIG. **4**. The cranks **44** are arranged on the support structure **400** such that they can be made to pivot about the pivot axis I by means of two pivot bearings **45**. In one derived embodiment, the support structure **400** comprises a hole ring for linking to the cranks. It is thus possible to

arrange the cranks **44** in various positions on the support structure **400**, in order to thus vary a position of the pivot axis I.

**[0050]** The support structure **400** represented comprises two endstops **46**, **47** by means of which, in the exemplary embodiment represented, a maximum movement of the chair structure **3** relative to the base frame **2** is limited. As shown in FIG. **1**, an endstop **47** arranged radially closer to the pivot axis I interacts with the crank **44** in order to prevent a pivoting movement beyond the reclining position. The arrangement of the endstops **46**, **47** is, however, only exemplary and can be appropriately chosen by one skilled in the art.

**[0051]** As shown in FIG. **4**, the cranks **44** are attached to the chair structure support **32** by means of a screw connection **34**. Alternatively or in addition to the above-described, derived embodiment of a support structure **400** with a hole ring for linking to the cranks **44**, it is conceivable to arrange the cranks at different positions on the chair structure support **32**, in order to thus vary a position of the pivot axis I.

**[0052]** The pivot mechanism **104** represented in FIGS. **5** to **7** comprises two concentrically arranged curved guides **140** which, in the exemplary embodiment represented, are connected mechanically to the chair structure support **32**. In the exemplary embodiment represented, the curved guides **140** are elongated in the region of the backrest **31**. The curved guides **140** thus support the backrest **31**. This also achieves an esthetically appealing structure.

**[0053]** FIG. **7** shows a detail Z from FIG. **5**. As shown in FIG. **7**, the curved guides **140** are in each case mounted in a counterstay **141** with three rollers **142**, such that they can be displaced. The counterstay **141** is assigned to the base frame **2** and is mounted on the base frame **2** by means of a clip **143**. In advantageous embodiments, the clip **143** is mounted in a height-adjustable manner with respect to the pedestal **20**. The chair device **101** further comprises two armrests **6** which are also connected to the base frame **2** by means of side plates **61** and by means of the clip **143**. In the exemplary embodiment represented in FIGS. **5** to **7**, the side plates **61** also serve as a housing for the counterstays **141**, wherein, in the representation according to FIG. **5**, the armrest **6** is represented offset with respect to the counterstay **141**, such that the counterstay **141** is visible.

**[0054]** The pivot mechanism **204** represented in FIGS. **8** to **10** comprises two articulation devices **8**, wherein an articulation device **8** is represented in detail in FIG. **11**. The articulation devices **8** each comprise an upper arm **80** and a lower arm **81** rotatably articulated to the upper arm. In that context, the upper arm **80** and the lower arm **81** are articulated to each other such that they can rotate about a schematically represented arm axis **82**. The upper arm **80** is further articulated to the base frame **2** about a schematically represented base axis **83**. More precisely, the upper arm **80** is attached to a clip **243** assigned to the base frame **2**. The lower arm **81** is articulated to the chair structure **3**, more precisely to the chair structure support **32**, such that it can rotate about an end axis **84**. The base axis **83**, the arm axis **82** and the end axis **84** intersect with each other at a schematically depicted central point **85**. A line connecting the two central points **85** defines the pivot axis I.

**[0055]** In the exemplary embodiment represented, the two articulation devices **8** are of similar and symmetric construction with respect to the plane of symmetry II depicted in FIG. **9** between the central points **85**.

**[0056]** The two articulation devices **8** permit a pivotable mounting about the pivot axis I, wherein the pivot mechanism **204** is arranged at a distance from the pivot axis I. It is thus possible to arrange the components of the pivot mechanism **204** below the seat **30** and at a distance from a use region of the armrests **6**. The risk of injury due to the user's body parts becoming trapped in the region of the pivot mechanism **204** is thus particularly low.

**[0057]** In the exemplary embodiment represented, each articulation device comprises two arms, specifically an upper arm **80** and a lower arm **81**. In other embodiments, further "arms" are provided which are in each case articulated such that they can be rotated about a further axis, wherein all further axes also pass through the central point **85**. Such arrangements are advantageous in that it becomes possible for the arms to be short and thus to make possible a good adaptation to tight spaces. In further embodiments, more than two articulation devices **8** are provided, wherein a central point of the additional articulation devices lies in the pivot axis I.

**[0058]** The base axes **83** are arranged on the clip **243** and are thus arranged immovably with respect to one another. Equally, the two end axes **84** are arranged on the common chair structure support **32** and are thus arranged immovably with respect to one another. The orientation of the base axis **83**, the arm axis **82** and the end axis **84**, and the length of the upper arm **80** and/or of the lower arm **81**, can be chosen freely within broad limits. It is thus possible to establish the central points **85** in a targeted manner in a desired region as a function, for example, of a mass of the chair structure; only the lateral deflection, which occurs per unit of angle, imposes limits in this context.

**[0059]** In the embodiment according to FIGS. **8** to **10**, the displacement mechanism for the legrest **7** further has a locking element **75**. The legrest **7** is mounted such that it is able to move relative to the seat **30** by means of the two guide rail pairs **70**, **71**, wherein an urging force, which urges the legrest **7** into the extended use position, is applied to the legrest **7**. The locking element **75** holds the legrest **7** in the stowed position, against the urging force. The legrest is extended semi-automatically when the locking element **75** is released. In the exemplary embodiment represented in FIGS. **8** to **10**, the legrest **7** has no cushion, such that it can be stowed in a particularly space-saving manner.

**[0060]** In all represented embodiments, a displacement movement between the work position and the reclining position is brought about manually. To that end, a user can for example support him-/herself on the armrests and, by leaning back, can initiate a pivoting movement into the reclining position. In other embodiments, the pivot mechanism comprises a drive or several drives. In that context, the drives can accordingly be chosen so as to be suited to the pivot mechanism.

**[0061]** In one embodiment, a timer with an alarm function is provided, wherein a user is awoken after a defined time has elapsed. To that end, in one embodiment, it is provided that when the time has elapsed an urging force is applied, by means of which the chair structure **3** is returned from the reclining position into the work position. In one development, the urging force is applied by a drive, in another embodiment by means of a spring which is released once the time has elapsed.

**[0062]** The materials required for producing the individual pivot mechanisms **4**, **104**, **204**, such as stainless steel, aluminum and appropriately robust plastic, are sufficiently available to one skilled in the art in the field of the production of

chair devices; in the knowledge of the invention it will be well within the expertise of one skilled in the art to select and dimension these accordingly.

**1**. A desk chair device comprising a base frame with a pedestal and a chair structure with a seat and a backrest,

wherein

a pivot mechanism is provided, by means of which the chair structure is mounted on the base frame such that it can be made to pivot, about a horizontal pivot axis, between a work position and a reclining position, wherein the pivot axis is arranged with respect to the base frame in a fixed position above the seat at least approximately in the region of a center of gravity of the chair structure together with a person using the chair structure as intended.

**2**. The desk chair device as claimed in claim **1**, wherein the chair structure comprises a chair structure support, wherein the seat and/or the backrest is/are mounted such that it/they can be adjusted relative to the pivot axis and attached to the chair structure support in at least two different positions.

**3**. The desk chair device as claimed in claim **1**, wherein the seat and the backrest are rigidly connected in order to transfer a displacement movement of the backrest to the seat.

**4**. The desk chair device as claimed in claim **1**, wherein the pivot mechanism comprises two support elements which are assigned to the base frame and are arranged at the side of the chair structure, and two cranks which are assigned to the chair structure and are mounted on the support elements such that they can be made to pivot.

**5**. The desk chair device as claimed in claim **1**, wherein the pivot mechanism comprises at least two curved guides which are arranged concentrically.

**6**. The desk chair device as claimed in claim **5**, wherein the two curved guides are assigned to the chair structure and are mounted displaceably in a counterstay assigned to the base frame.

**7**. The desk chair device as claimed in claim **5**, wherein a profile of the bending line of the two curved guides is optimized for a pivoting movement.

**8**. The desk chair device as claimed in claim **1**, wherein the pivot mechanism comprises two articulation devices, each of which has at least one upper arm and one lower arm which is articulated to the upper arm such that it can be made to rotate about an arm axis, wherein the upper arm is articulated to the base frame such that it can be made to rotate about a base axis, the lower arm is articulated to the chair structure such that it can be made to rotate about an end axis, the base axis, the arm axis and the end axis of each articulation device intersect with each other in each case at a central point and the line connecting the two central points defines the pivot axis.

**9**. The desk chair device as claimed in claim **8**, wherein the two articulation devices are constructed symmetrically with respect to the plane of symmetry between the two central points.

**10**. The desk chair device as claimed in claim **8**, wherein the end axes run in a common normal plane to the pivot axis.

**11**. The desk chair device as claimed in claim **7**, wherein the base axes lie in a common plane.

**12**. The desk chair device as claimed in claim **1**, wherein the chair structure comprises a legrest which can be displaced between a use position and a stowed position.

**13**. The desk chair device as claimed in claim **12**, wherein the legrest is articulated to the chair structure such that it can be made to pivot.

**14**. The desk chair device as claimed in claim **12**, wherein the legrest is mounted such that it can be pushed and folded into a drawer.

* * * * *