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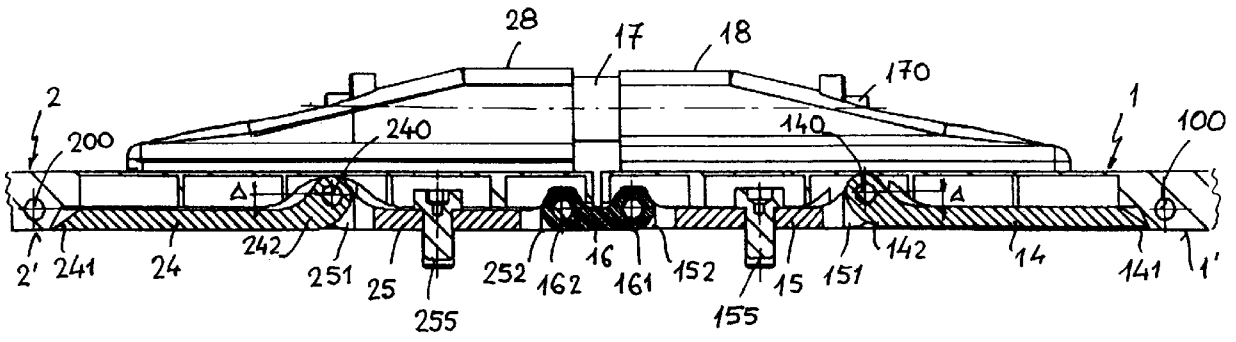

Fig. 8

(57) Abstract: When attached to a top surface of a ski, a platform enables to achieve each desired standing height, which can optionally also be relatively small, and moreover also allows unhindered bending of a ski or snowboard by simultaneously dampening of vibrations. In such manner such platform improves guiding and reactivity performances of a ski or snowboard by turning, and is moreover capable to withstand to long-term dynamic mechanical stresses. Said platform consists of a front bearing plate (1) and a rear bearing plate (2), which are arranged in mutual alignment at certain distance apart from each other, and are moreover pushed apart from each other by means of at least one spring (17, 17'), which is embedded within corresponding guides (18, 28; 180, 28') on the front and rear bearing plate (1, 2).

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Platform for mounting of a ski binding onto a ski or snowboard

The invention refers to a platform for mounting of a ski binding onto a ski or snowboard. Pursuant to the International Patent Classification (IPC[9]) such inventions belong to Class, namely to the field of skis and/or ski bindings, namely to elements, which are intended for dampening of vibrations generated by sliding the ski along each ground.

More exactly, the invention refers to a platform, which can be subsequently mounted onto a top surface of a previously finalized ski or a mono-ski (to those skilled in the art also known under English expression *snowboard*), and on such platform then a ski binding can be mounted, namely a front part and a rear part of the ski binding, by means of which then during the use of the ski a ski shoe is held in its position above said top surface in the central area of the ski. During a practical use on each disposable terrain, said ski or snowboard is practically all the

time bent like a bending beam of certain thickness, which results in deformations on its surface, namely in contractions and extensions of its bottom sliding surface as well as on its top surface, on which, or at least proximal to which said platform, both parts of the ski binding and said ski shoe are located. Moreover, during the use either said bending deformations or also any other mechanical influences often result in vibrations with negative influences with respect to guiding performances of the ski in each desired direction. Whenever a platform is mounted on such ski, said platform is also exposed to said stresses and deformations. Since the weight of the platform should be as low as possible, mechanic stresses therein may be relatively high, which in combination with a dynamic nature of said stresses during the time results in local defects of the material of the platform, in particular cracks.

Consequently, the purpose of the present invention is to create a platform, which should after mounting thereof onto the top surface of the ski or snowboard provide each desired - optionally even a relatively small - standing height, and allow unhindered bending of the ski or snowboard by simultaneously dampening of vibrations, so that such platform would have to contribute to better guiding performances and impulsiveness of the ski or snowboard by turning, but at the same time such platform should also be able to withstand during its whole lifetime to all aforementioned mechanical stresses.

In DE 9317689U (ROSSIGNOL SA) a ski is disclosed, on the upper side of which a platform is fixed, which consists of rigid and viscoelastic layers placed one above the other, with the viscoelastic layer being the bottom one. Such a platform facilitates the fixing of both parts of the ski binding at the suitable distance from the upper ski surface and thus ensures the desired standing height. The latter can also be very small, which is convenient for racing skis which have to comply with

the regulations. At the same time such a platform facilitates the damping of some vibrations, those which are transferred from the ski to the skier's leg thereby applying pressure on the skier. On the other hand, due to the rigid layer such a platform significantly restricts bending of the ski and during the application of pressure it changes the course of the bending line. Consequently, the transmission of forces on each active edge is uneven and because of that a significant part of the edge is practically inactive during the turn, which definitely impacts the adherence and manageability of the ski during the turn. The influence of such a platform on the damping of the oscillation of the ski itself is only negligible or at least insufficient and for this reason at each application of pressure the ski can oscillate relatively unhindered and gradually, which definitely impacts the pressure on each active edge and thus the manageability of the ski during the turn and while exiting the turn. Furthermore, the bending deformations of the ski on the upper surface of said ski and also on the surface of such a platform result in an elongated or contracted distance between the front and rear part of the ski binding. Such deformations in the longitudinal direction during the extreme bending pressure on the ski can amount up to 1 centimeter and should in principle be compensated for by at least the most perfected ski bindings. Theoretically this is true, but in practice e.g. during a race such deformations follow each other so quickly that spring-loaded elements of ski bindings cannot keep up with the changes, which results in a disconnection between the ski boot and the ski binding, thus separating the ski boot from the ski.

Furthermore, in JP 8257199 (OGASAKA SKI SEISAKUSHO) a platform was proposed which is also fixable to the finalized ski and provides for the desired standing height, which can be relatively small, and the fixing of both parts of the binding as well as an unobstructed bending of the ski. Such a platform is basically

designed as a plate made of a material based on synthetic resins which in the central area between the locations for the fixing of both ski binding parts includes a zigzag weak spot consisting of lateral ribs and grooves. Even though such a platform actually facilitates an unobstructed bending of the ski and thus a corresponding distribution of pressure along the whole active length of each active edge, the problem of the compensation of bending deformations on the ski surface despite all other advantages still persists.

EP 1 031 360 (Bünter R.) proposes a platform which consists of a rigid plate and a pair of axial vibration dampers each of which has an articulated connection to said plate on one side and to the corresponding flange, which is fixed on the upper ski surface in its central part, on the other side. Said plate extends longitudinally along the ski and the dampers are situated in said direction one after another. Thanks to a two-point anchorage of the platform, such a design should facilitate an unobstructed bending of the ski and an efficient damping of vibrations and at the same time a possible tilt of the platform in the downward and forward directions. The latter can be favourable in certain skiing styles or disciplines, especially e.g. downhill. However, the problem of the compensation of bending deformations during the extreme bending of the ski remains unsolved with this platform.

Moreover, in US 6,513,826 B1 (Hangl A.) a platform is described, consisting of leading plates fixed to the ski to which fixing plates are mounted, each of which is adapted to receive one part of the ski binding and one of which is, thanks to two longitudinal grooves, adjustable longitudinally. Said fixing plates are then connected to each other with a longitudinal binding which also, if necessary, facilitates the change in the distance between the fixing plates, namely the adjustment of this distance to the size of the ski boot. Such a platform also

facilitates the required standing height. The vibration damping occurs to a certain extent because of the friction during the shifting of the longitudinally adjustable fixing plate along the leading plate, which is a result of the bending of the ski. Both desired qualities, namely allowing the ski to bend and damping the vibrations, contradict each other in this solution – when one of them is more distinctive, the other plays a more marginal role and vice versa. On the other hand, there is also a problem that the forces which affect the ski normally, i.e. perpendicularly to the longitudinal direction, and cause the bending and vibrations or deformations which are a result of those forces are redirected in the grooves of the leading plate from said normal direction to the longitudinal direction, which results in a significant friction and high local load to the parts in said area, which in practical use in turn leads to a significant obstruction of free bending of the ski on the one hand and enormous wear of the parts in said area on the other hand.

Furthermore, in SI 21309 A (Sitar F.) there is a solution of the platform consisting of a pair of fixing elements spaced apart in the longitudinal direction of the ski which are separately screwed to the ski and over which a connective plate is placed with the front and the rear part of the ski binding being fixed to it. The connective plate is fixed to said elements fixed in elastic assemblies each of which is comprised of an elastic insertion and a fixing screw. Said assemblies are intended for damping of vibrations which are transferred from the ski to the skier's legs. In one of the constructions, which facilitates an unobstructed bending of the ski, the connective plate is pivotally connected on one side to one of the fixing elements fixed to the ski which is linked to said connective plate on one side and corresponding fixing element on the other side using articulated rocker arms. On the opposite end the connective plate is turnably linked to the corresponding fixing element with a suitable bolt. In this case the elastic assemblies for vibration

damping are available in fixing elements while the articulated linkage between the plate and the fixing element facilitates, at least in limited extent, a compensation of deformations on the upper surface of the ski. In spite of the above measures such a platform in certain states of pressure can affect the course of the bending line of the ski and in turn the distribution of the pressure along each active edge and consequently also the manageability of the ski in the desired direction.

Moreover, a platform for fixing the ski binding to the ski is disclosed in EP 2 285 457 B1 and consists of a fixing assembly, which is comprised of at least a base plate which is adapted to be fixed to the upper surface of the ski in each selected area for fixing the ski binding, while said fixing assembly is adapted to hold the ski boot in the desired position of the intended front assembly and rear assembly of the ski binding. Such platform is characterized in that the elastically deformable base plate is adapted to receive the front positioning plate and the rear positioning plate whose positions on said base plate can be selected depending on each desired position of both ski binding assemblies, especially depending on the size of each available ski boot. Furthermore, on the front positioning plate a front bearing plate is foreseen which receives the front ski binding assembly and is linked with the front positioning plate with a pair of levers which are pivotally connected via pivot joints to the corresponding positioning plate on one side and via pivot joints to said bearing plate on the other side, namely the inner and outer levers. At the same time, on the rear positioning plate the rear bearing plate is intended, adapted to receive the rear ski binding assembly and is linked with the rear positioning plate with a pair of levers which are pivotally connected via pivot joints to the corresponding positioning plate on one side and via pivot joints to said bearing plate on the other side, namely the inner and outer levers. The inner lever pivot joint and the outer lever pivot joint on the front positioning plate are preferentially

situated on the line which extends in the longitudinal direction of the ski, the outer lever pivot joint on the front bearing plate is situated below said line while the inner lever pivot joint on the front bearing plate is situated below said line of the bend-undeformed ski and above said line of the bend-deformed ski. Quite analogously, the inner lever pivot joint and the outer lever pivot joint on the rear positioning plate are situated on the line which extends at least approximately in the longitudinal direction of the ski, the outer lever pivot joint on the rear bearing plate is situated below said line while the inner lever pivot joint on the rear bearing plate is situated below said line of the bend-undeformed ski and above said line of the bend-deformed ski. Furthermore, each lever is designed either as a suitably rigid uniform lever or it consists of at least two rigidly connected blades or levers, which are and at the same time pivotable around the same axes. Still further, said one-piece or multi-piece base plate of the platform according to the invention preferentially consists of at least one longitudinal guide in whose area the front positioning plate and the rear positioning plate, which can be moved along said guide and then fixed to each selected position, are fixed to the base plate. To fix the positioning plates to each selected position, a series of suitably placed holes in the base plate is preferentially intended which are adjusted to receive suitable screws to fix each positioning plate.

The present invention refers to a platform for mounting of a ski binding onto a ski or snowboard, wherein such platform is suitable for attachment onto a top surface of each disposable ski or snowboard, which is faced away from the ground, wherein said platform consists of a front bearing plate and a rear bearing plate, so that said front bearing plate is adapted to receive a front part of a ski binding for attachment of a ski shoe onto said ski or snowboard, and said rear bearing plate is analogously adapted to receive a rear part of a ski binding for attachment of a ski

shoe onto said ski or snowboard. Each of said bearing plates is furnished with a central area, an outer terminal area as well as an inner terminal area, wherein said inner terminal areas are arranged at smaller distance apart of each other, while the outer terminal areas are arranged at larger distance apart from each other. At least one connecting member is pivotally around a transversal axis linked to each of said bearing plate in the outer terminal area thereof, and is optionally in the area of at least one bore attachable to the top surface of the ski or snowboard.

The platform according to the invention is characterized in that a pivot lever, which is pivotable around the transversal axis, is pivotally attached to the central area of said front bearing plate and is on its end portion furnished with an outer eye and an inner eye, and that analogously a pivot lever, which is rotatable around the transversal axis, is pivotally attached to the central area of said rear bearing plate and is on its end portion furnished with an outer eye and an inner eye. Said front pivot lever is by means of its outer eye pivotally connected to the front bearing plate, while said rear pivot lever is by means of its outer eye pivotally connected to the rear bearing plate, and the front connecting member, which is attachable to the top surface of the ski or snowboard, is by means of its outer eye pivotally connected to the inner eye of the front pivot lever, while the rear connecting member, which is attachable to the top surface of the ski or snowboard, is by means of its outer eye pivotally connected to the inner eye of the rear pivot lever. Said platform is furthermore furnished with an intermediate connecting member, which comprises a front eye, which is arranged on the side of the front connecting member, as well as a rear eye, which is arranged on the side of the rear connecting member, so that said front eye of the intermediate connecting member is pivotally connected to the inner eye of the front connecting member and said rear eye of the intermediate connecting member is pivotally connected to the inner eye of the rear

connecting member, wherein said pivotal connection of the outer eye of the front pivot lever with the front bearing plate enables pivoting around said transversal axis, and said pivotal connection of the outer eye of the rear pivot lever with the rear bearing plate, enables pivoting around said transversal axis. On the other hand, also said pivotal connection between said inner eye of the front pivot lever and the outer eye of the front connecting member enables pivoting around a transversal axis and the pivotal connection between said inner eye of the rear pivot lever and the outer eye of the rear connecting member enables pivoting around a transversal axis. Said transversal axis are arranged at a distance apart from the bottom surface of the front bearing plate, or the rear bearing plate respectively, which is enlarged for a predetermined distance, and consequently, the front and rear connecting member are on the front and rear pivot lever embedded eccentrically with regard to embedding of each pivot lever on the front and rear bearing plate, and said front and rear bearing plate are arranged in mutual alignment at certain distance apart from each other, and are moreover pushed apart from each other by means of at least one spring, which is embedded within corresponding guides on the front and rear bearing plate.

Such platform is furthermore characterized in that, in its loaded state the front and rear pivot lever and also the front and rear connecting member, which are attachable to a ski or a snowboard, and the intermediate connecting member are coplanar with respect to the bottom surfaces of the front and rear bearing plate, which are faced towards the ski or snowboard, while in its unloaded state said connecting members and said intermediate connecting member are spaced apart from the plane defined by the bottom surfaces of the bearing plates, by which the pivot levers are correspondingly pivoted around their transversal axis.

In one of the embodiments of the invention, said front connecting member is attached to the top surface of the ski or snowboard by means of a screw, and also said rear connecting member is attached to the top surface of the ski or snowboard by means of a screw.

In a further embodiment of the invention, each spring is a compression helical spring, which extends along said bearing plates and is with each of its end portions inserted into a guide on the front bearing plate and into a guide on the rear bearing plate of the platform. Each desired tension of said spring is adjusted by means of a regulating screw, which extends through each neighboring guides on said bearing plates and also through said spring as such.

In an alternative embodiment of the invention, said spring intended for pushing the bearing plates apart from each other is a tubular spring and consists of rubber, and is moreover arranged transversally and embedded within corresponding guides. Also in such case each desired tension of said spring is adjusted by means of a regulating screw, which extends there-through.

The invention will be described on the basis of an embodiments, which are presented in the attached drawings, wherein

Fig. 1 shows the first embodiment of a platform for mounting of a ski binding onto a ski or snowboard, in a top view i.e. in a view in a direction towards a belonging ski or snowboard in its loaded state;

Fig. 2 is longitudinal cross-section of a platform according to Fig. 1;

Fig. 3 is a bottom view of a platform according to Fig. 1, i.e. a view in a direction away from the top surface of the ski or snowboard;

Fig. 4 is a platform for mounting of a ski binding onto a ski or snowboard shown in the longitudinal direction from the rear side;

Fig. 5 is a platform for mounting of a ski binding onto a ski or snowboard shown in the longitudinal direction from the front side;

Fig. 6 is a detail A according to Fig. 1;

Fig. 7 is a platform for mounting of a ski binding onto a ski or snowboard shown in a cross-section along the plane VII - VII according to Fig. 1;

Fig. 8 is a platform for mounting onto a ski or snowboard shown in a cross-section along the plane VIII - VIII according to Fig. 1;

Fig. 9 is enlarged presentation of a cross-section according to Fig. 7;

Fig. 10 is a released platform for mounting of a ski binding on a ski or snowboard shown in a cross-section along the plane X - X according to Fig. 1;

Fig. 11 is a platform for mounting of a ski binding on a ski or snowboard shown in a cross-section along the plane XI - XI according to Fig. 1, also in its released state;

Fig. 12 is a further embodiment of a platform for mounting of a ski binding onto a ski or snowboard according to Fig. 1, shown in a longitudinal cross-section;

Fig. 13 is platform for mounting of a ski binding onto a ski or snowboard according to Fig. 12, shown in a longitudinal cross-section along the plane XIII - XIII.

Platform according to Fig. 1 - 13 is suitable for attachment onto a top surface of each disposable ski or snowboard, which is faced away from the ground. The basic concept of a platform intended for mounting onto a ski substantially corresponds to a platform intended for mounting onto a snowboard, however a platform used on a ski is usually narrower than the platform used on a snowboard, since a ski is usually narrower than a snowboard.

As evident in Figs. 1 and 2, such platform consists of a front bearing plate 1 and a rear bearing plate 2, which are on the one hand mutually aligned along the ski or snowboard and spaced apart from each other, and on the other hand pivotally connected both to the ski or snowboard and also with each other in a manner, which will be later-on described in some more detail.

Said front bearing plate 1 is adapted to receive a front part of a not shown ski binding for attachment of a ski shoe onto said ski or snowboard, and said rear bearing plate 2 is analogously adapted to receive a rear part of said ski binding for attachment of a ski shoe onto said ski or snowboard. To this aim, threaded bores 19, 29 can optionally be prepared on said parts 1, 2 of the platform.

Each of said bearing plates 1, 2 is furnished with a central area 10, 20, an outer terminal area 11, 21 as well as an inner terminal area 12, 22, wherein said inner terminal areas 12, 2) are arranged at smaller distance apart of each other, while the outer terminal areas 11, 21 are arranged at larger distance apart from each other.

At least one connecting member 13, 23 is pivotally around the transversal axis 130, 230 linked to each of said bearing plates 1, 2 in the outer terminal area 11, 21 thereof, and is optionally in the area of at least one bore 131, 231 attachable to the top surface of the ski or snowboard.

A pivot lever 14, which is pivotable around the transversal axis 100, is pivotally attached to the central area 10 of said front bearing plate 1 and is on its end portion furnished with an outer eye 141 and an inner eye 142. Quite analogously, a pivot lever 24, which is rotatable around the transversal axis 200, is pivotally attached to

the central area 20 of said rear bearing plate 2 and is on its end portion furnished with an outer eye 241 and an inner eye 242.

Said front pivot lever 14 is by means of its outer eye 141 pivotally connected to the front bearing plate 1, while said rear pivot lever 24 is by means of its outer eye 241 pivotally connected to the rear bearing plate 2.

A front connecting member 15, which is in the embodiment according to Fig. 8 by means of a screw 155 attachable to the top surface of the ski or snowboard, is by means of its outer eye 151 pivotally connected to the inner eye 142 of the front pivot lever 14, while the rear connecting member 25, which is in the embodiment according to Fig. 8 by means of a screw 255 attachable to the top surface of the ski or snowboard, is by means of its outer eye 251 pivotally connected to the inner eye 242 of the rear pivot lever 24.

Said platform is furthermore furnished with an intermediate connecting member 16, which comprises a front eye 161, which is arranged on the side of the front connecting member 15, as well as a rear eye 162, which is arranged on the side of the rear connecting member 55, so that said front eye 161 of the intermediate connecting member 16 is pivotally connected to the inner eye 152 of the front connecting member 15 and said rear eye 162 of the intermediate connecting member 16 is pivotally connected to the inner eye 252 of the rear connecting member 25.

The pivotal connection of the outer eye 141 of the front pivot lever 14 with the front bearing plate 1 enables pivoting around said transversal axis 100 and said pivotal connection of the outer eye 241 of the rear pivot lever 24 with the rear

bearing plate 1 enables pivoting around said transversal axis 200. On the other hand, the pivotal connection between said inner eye 142 of the front pivot lever 14 and the outer eye 151 of the front connecting member 15 enables pivoting around a transversal axis 140 and the pivotal connection between said inner eye 242 of the rear pivot lever 24 and the outer eye 251 of the rear connecting member 25 enables pivoting around a transversal axis 240. In this, said transversal axis 140, 240 are arranged at a distance apart from the bottom surface 1', 2' of the front bearing plate 1, or the rear bearing plate 2 respectively, which is enlarged for a predetermined distance, which is in fig. 8 marked as Δ. Consequently, the front and rear connecting member 15, 25 are on the front and rear pivot lever 14, 24 embedded eccentrically with regard to embedding of each pivot lever 14, 24 on the front and rear bearing plate 1, 2.

In Figs 8 and 9, and also 2 and 7, the platform is presented in its loaded state, in which the front and rear pivot lever 14, 24 and also the front and rear connecting member 15, 25, which are attachable to a ski or a snowboard, as well as the intermediate connecting member 16, are coplanar with respect to the bottom surfaces 1', 2' of the front and rear bearing plate 1, 2, which are faced towards the ski or snowboard. Platform is in its unloaded i.e. released state presented in Figs 10 and 11.

In the released state of the platform, said connecting members 15, 25 and said intermediate connecting member 16 are spaced apart from the plane defined by the bottom surfaces 1', 2' of the bearing plates 1, 2, by which the pivot levers 14, 24 are correspondingly pivoted around their transversal axis 100, 200. During each movement between both previously mentioned positions of the connecting members 15, 25 and the intermediate member 16, the front connecting member 15

in connection with the front pivot lever 14 and/or the rear connecting member 25 in connection with the rear pivot lever 24 must pass a dead point, which in the first stage gradually decelerates such movement, but in the subsequent stage after passing said dead point said movement is accelerated. Such phenomena results in serious benefits by guiding performances of a ski or snowboard by turning, since on the one hand each potential vibrations are herewith dampened, while on the other hand in the first stage of turning such introduced energy is accumulated, and is during the next stage of turning released, by which performing of said final stage of turning can be essentially accelerated.

As mentioned, said front and rear bearing plate 1, 2 are arranged in mutual alignment at certain distance apart from each other, and are moreover pushed apart from each other by means of at least one spring 17, 17', which is embedded within corresponding guides 18, 28; 180, 28' on the front and rear bearing plate 1, 2.

In the first embodiment (Figs 1 as well as 10 and 11) said spring 17, 17' is a compression helical spring, which extends along said bearing plates 1, 2 and is with each of its end portions inserted into a guide 18', 18' on the front bearing plate 1 and into a guide 28', 28' on the rear bearing plate 2 of the platform. Each desired tension of said spring 17, 17' is adjusted by means of a regulating screw 170, 170', which extends through each neighboring guides 18, 28; 18', 28' on said bearing plates 1, 2 and also through said spring 17, 17' as such.

In a further embodiment said spring 17 is a tubular spring consisting of rubber, which is arranged transversally and embedded within corresponding guides 181, 182, and each desired tension of said spring 17, 17' can be adjusted by means of a regulating screw 170, which extends there-through.

CLAIMS

1. Platform for mounting of a ski binding onto a ski or snowboard, wherein such platform is suitable for attachment onto a top surface of each disposable ski or snowboard, which is faced away from the ground, wherein said platform consists of a front bearing plate (1) and a rear bearing plate (2), so that said front bearing plate (1) is adapted to receive a front part of a ski binding for attachment of a ski shoe onto said ski or snowboard, and said rear bearing plate (2) is analogously adapted to receive a rear part of a ski binding for attachment of a ski shoe onto said ski or snowboard, and wherein each of said bearing plates (1, 2) is furnished with a central area (10, 20), an outer terminal area (11, 21) as well as an inner terminal area (12, 22), wherein said inner terminal areas (12, 22) are arranged at smaller distance apart of each other, while the outer terminal areas (11, 21) are arranged at larger distance apart from each other, and wherein at least one connecting member (13, 23) is pivotally around a transversal axis (130, 230) linked to each of said bearing plates (1, 2) in the outer terminal area (11, 21) thereof, and is optionally in the area of at least one bore (131, 231) attachable to the top surface of the ski or snowboard, **characterized in that** a pivot lever (14), which is pivotable around the transversal axis (100), is pivotally attached to the central area (10) of said front bearing plate (1) and is on its end portion furnished with an outer eye (141) and an inner eye (142), and that analogously a pivot lever (24), which is rotatable around the transversal axis (200), is pivotally attached to the central area (20) of said rear bearing plate (2) and is on its end portion furnished with an outer eye (241) and an inner eye (242), wherein said front pivot lever (14) is by means of its outer eye (141) pivotally connected to the front bearing plate (1), while said rear pivot lever (24) is by means of its outer eye (241) pivotally connected to the rear

bearing plate (2), and wherein the front connecting member (15), which is attachable to the top surface of the ski or snowboard, is by means of its outer eye (151) pivotally connected to the inner eye (142) of the front pivot lever (14), while the rear connecting member (25), which is attachable to the top surface of the ski or snowboard, is by means of its outer eye (251) pivotally connected to the inner eye (242) of the rear pivot lever (24), and wherein said platform is furthermore furnished with an intermediate connecting member (16), which comprises a front eye (161), which is arranged on the side of the front connecting member (15), as well as a rear eye (162), which is arranged on the side of the rear connecting member (55), so that said front eye (161) of the intermediate connecting member (16) is pivotally connected to the inner eye (152) of the front connecting member (15) and said rear eye (162) of the intermediate connecting member (16) is pivotally connected to the inner eye (252) of the rear connecting member (25), and wherein said pivotal connection of the outer eye (141) of the front pivot lever (14) with the front bearing plate (1) enables pivoting around said transversal axis (100) and said pivotal connection of the outer eye (241) of the rear pivot lever (24) with the rear bearing plate (1) enables pivoting around said transversal axis (200), while on the other hand the pivotal connection between said inner eye (142) of the front pivot lever (14) and the outer eye (151) of the front connecting member (15) enables pivoting around a transversal axis (140) and the pivotal connection between said inner eye (242) of the rear pivot lever (24) and the outer eye (251) of the rear connecting member (25) enables pivoting around a transversal axis (240), wherein said transversal axis (140, 240) are arranged at a distance apart from the bottom surface (1', 2') of the front bearing plate (1), or the rear bearing plate (2) respectively, which is enlarged for a predetermined distance (Δ), and consequently, the front and rear connecting member (15, 25) are on the front and rear pivot lever (14, 24) embedded eccentrically with regard to embedding of each pivot lever (14,

24) on the front and rear bearing plate (1, 2), and wherein said front and rear bearing plate (1, 2) are arranged in mutual alignment at certain distance apart from each other, and are moreover pushed apart from each other by means of at least one spring (17, 17'), which is embedded within corresponding guides (18, 28; 180, 28') on the front and rear bearing plate (1, 2).

2. Platform according to Claim 1, **characterized in that**, in its loaded state the front and rear pivot lever (14, 24) and also the front and rear connecting member (15, 25), which are attachable to a ski or a snowboard, and the intermediate connecting member (16) are coplanar with respect to the bottom surfaces (1', 2') of the front and rear bearing plate (1, 2), which are faced towards the ski or snowboard.

3. Platform according to Claim 1, **characterized in that**, in its unloaded state said connecting members (15, 25) and said intermediate connecting member (16) are spaced apart from the plane defined by the bottom surfaces (1', 2') of the bearing plates (1, 2), by which the pivot levers (14, 24) are correspondingly pivoted around their transversal axis (100, 200).

4. Platform according to anyone of Claims 1 - 3, **characterized in that**, said front connecting member (15) is attached to the top surface of the ski or snowboard by means of a screw (155).

5. Platform according to anyone of Claims 1 - 4, **characterized in that**, said rear connecting member (25) is attached to the top surface of the ski or snowboard by means of a screw (255).

6. Platform according to anyone of Claims 1 - 6, **characterized in that**, each spring (17, 17') is a compression helical spring, which extends along said bearing plates (1, 2) and is with each of its end portions inserted into a guide (18', 18') on the front bearing plate (1) and into a guide (28', 28') on the rear bearing plate (2) of the platform.

7. Platform according to Claim 6, **characterized in that**, each desired tension of said spring (17, 17') is adjusted by means of a regulating screw (170, 170'), which extends through each neighboring guides (18, 28; 18', 28') on said bearing plates (1, 2) and also through said spring (17, 17') as such.

8. Platform according to anyone of Claims 1 - 5, **characterized in that**, said spring (17) is a tubular spring consisting of rubber, which is arranged transversally and embedded within corresponding guides (181, 182).

9. Platform according to Claim 8, **characterized in that**, each desired tension of said spring (17, 17') is adjusted by means of a regulating screw (170) extending there-through.

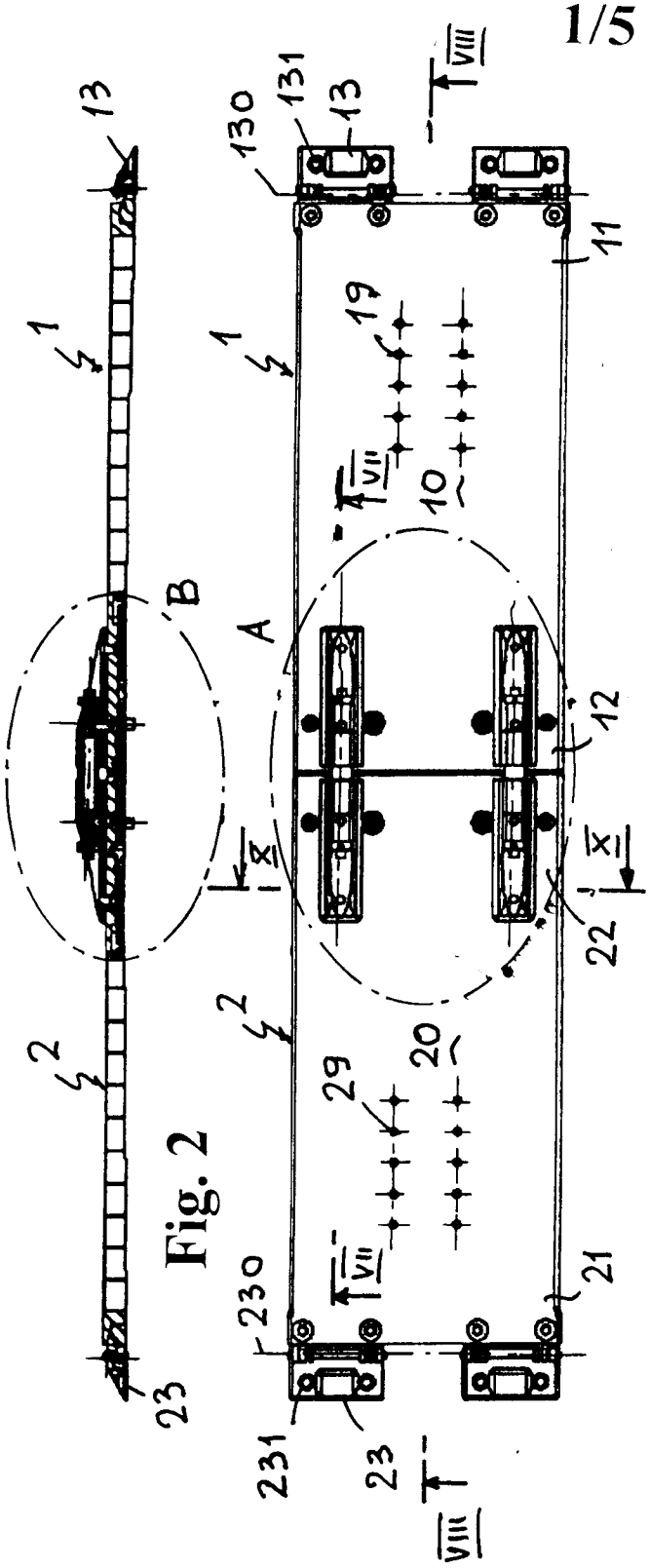


Fig. 2

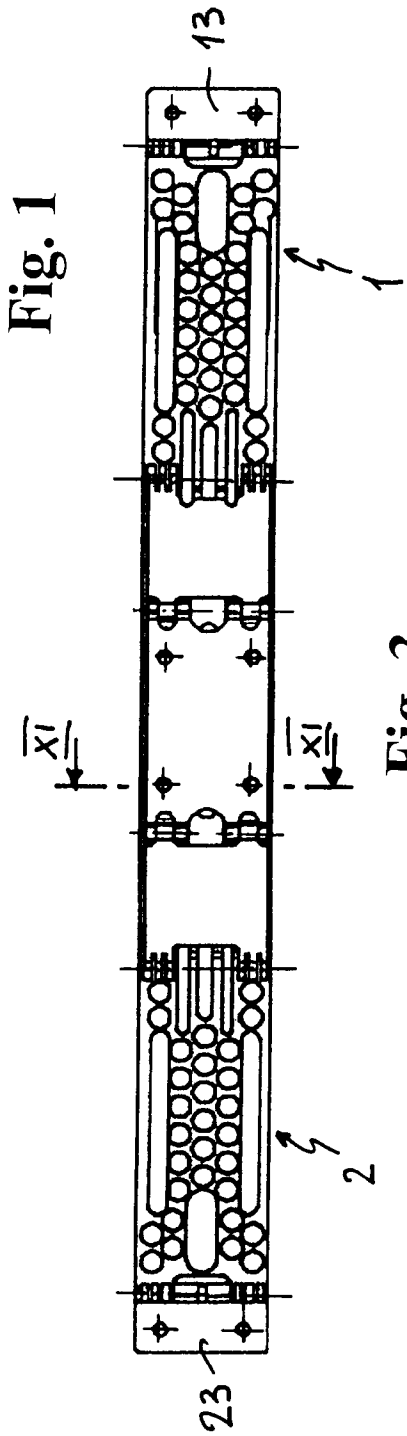
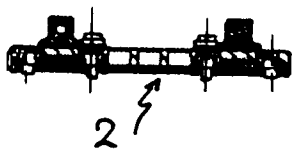


Fig. 3

Fig. 1

Fig. 4



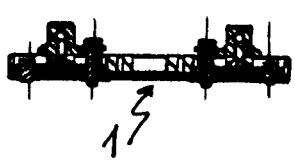


Fig. 5

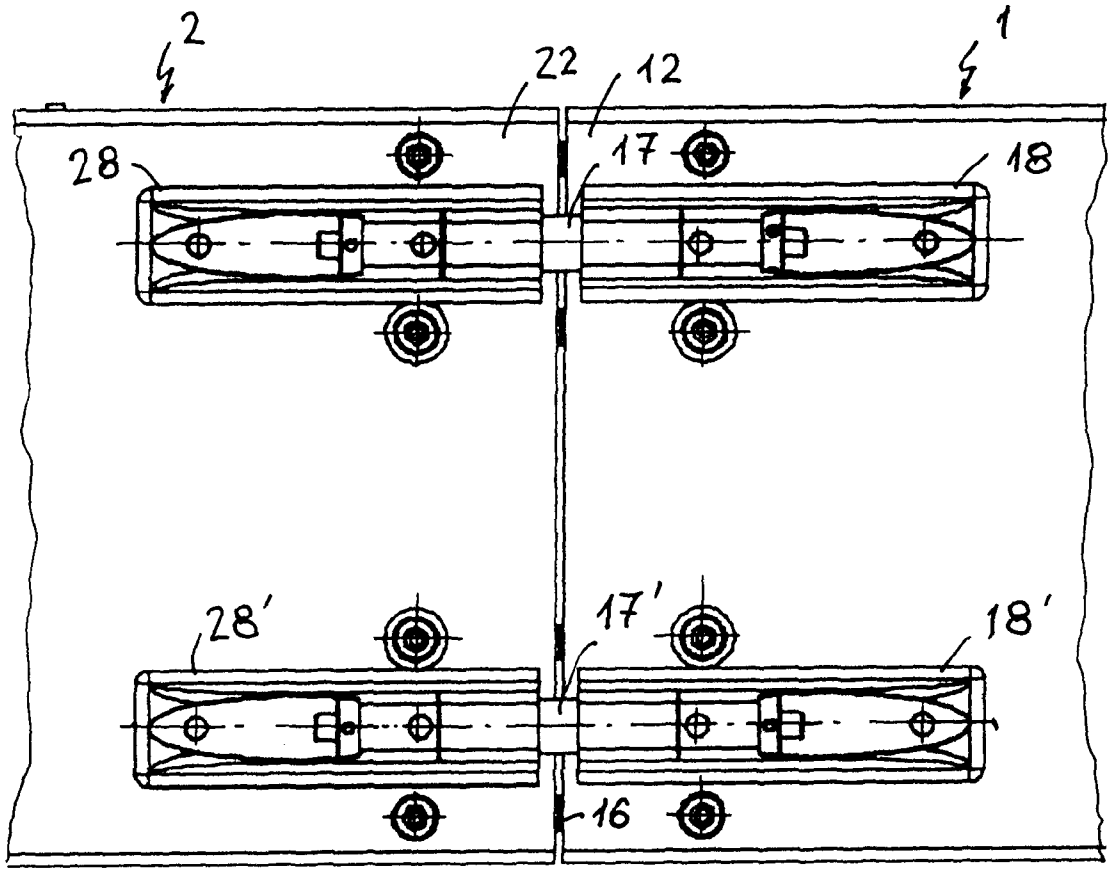


Fig. 6

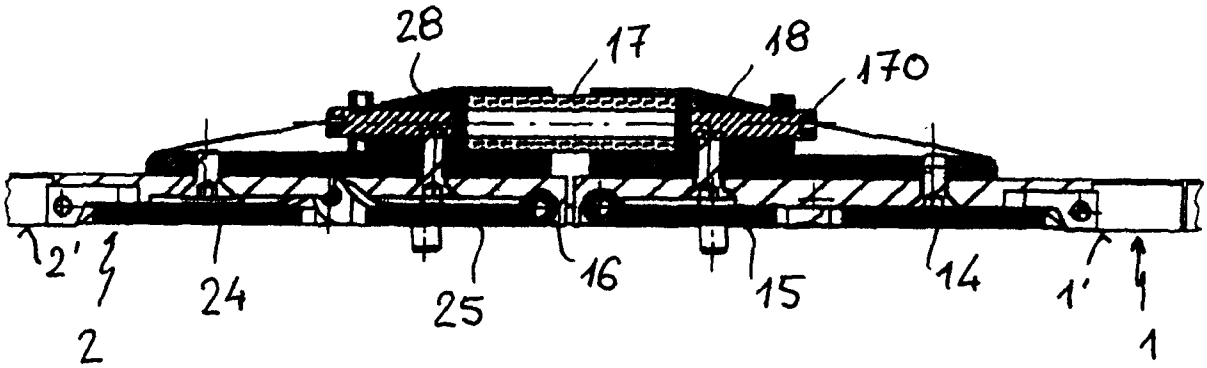


Fig. 7

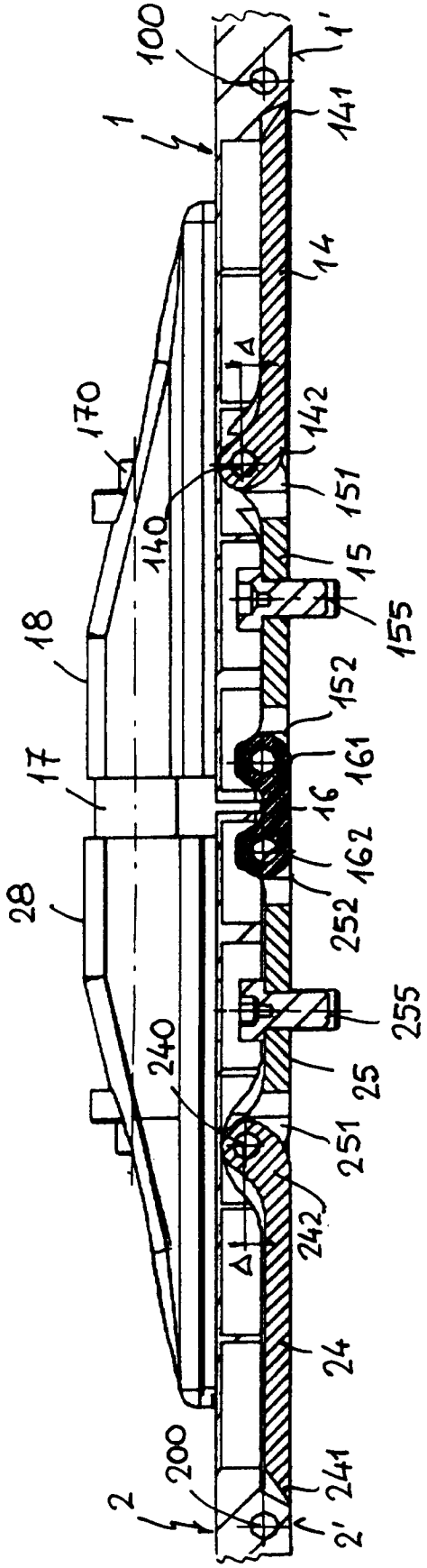
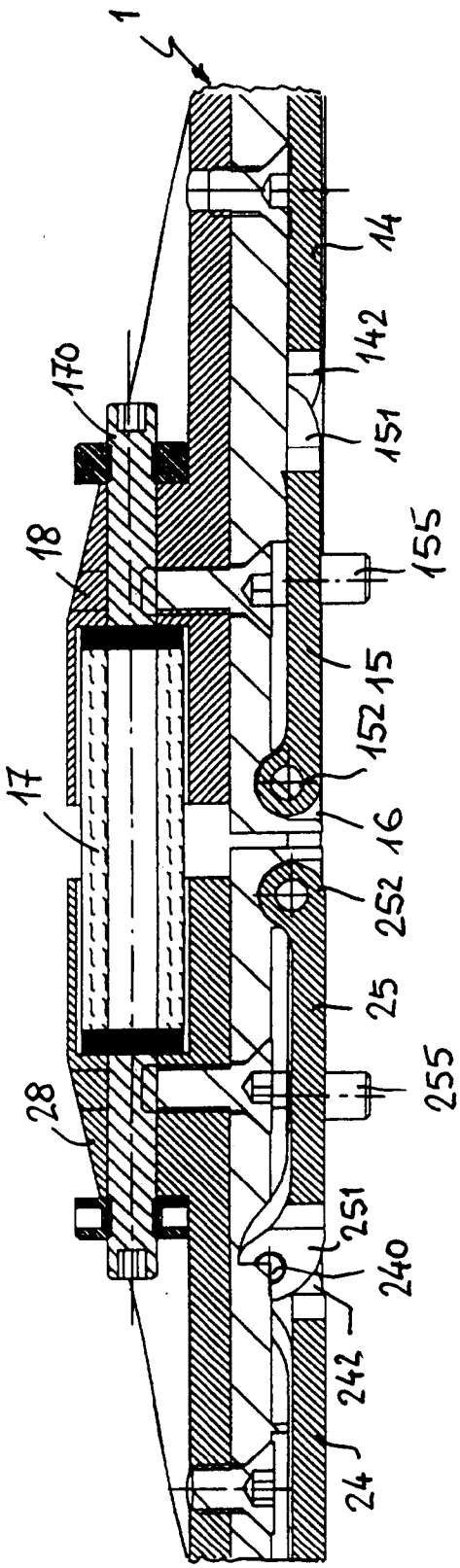

100
1
1'
141
14
170
142
151
140
15
155
18
152
17
161
16
162
28
252
255
240
25
251
242
24
200
241
2
2'

Fig. 8


1
14
142
170
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18
155
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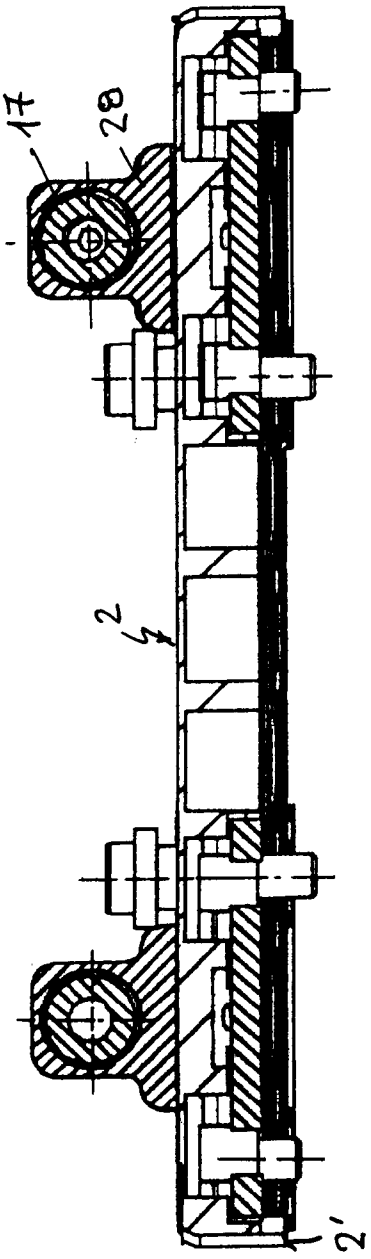
17
16
252
25
28
255
251
240
242
24

Fig. 9

Fig. 10



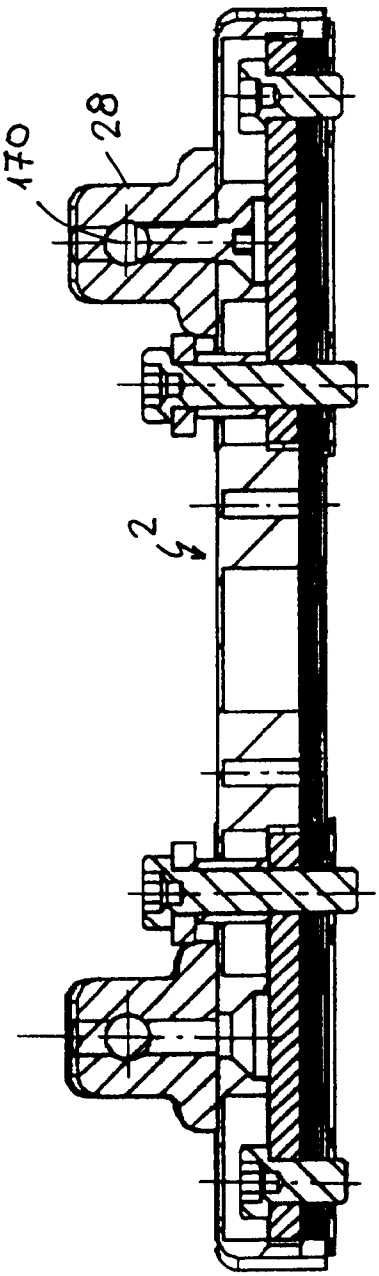


Fig. 11

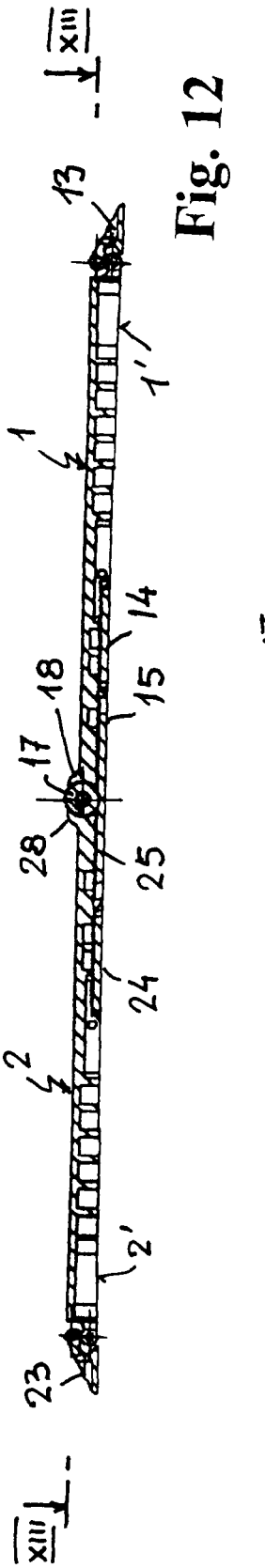


Fig. 12

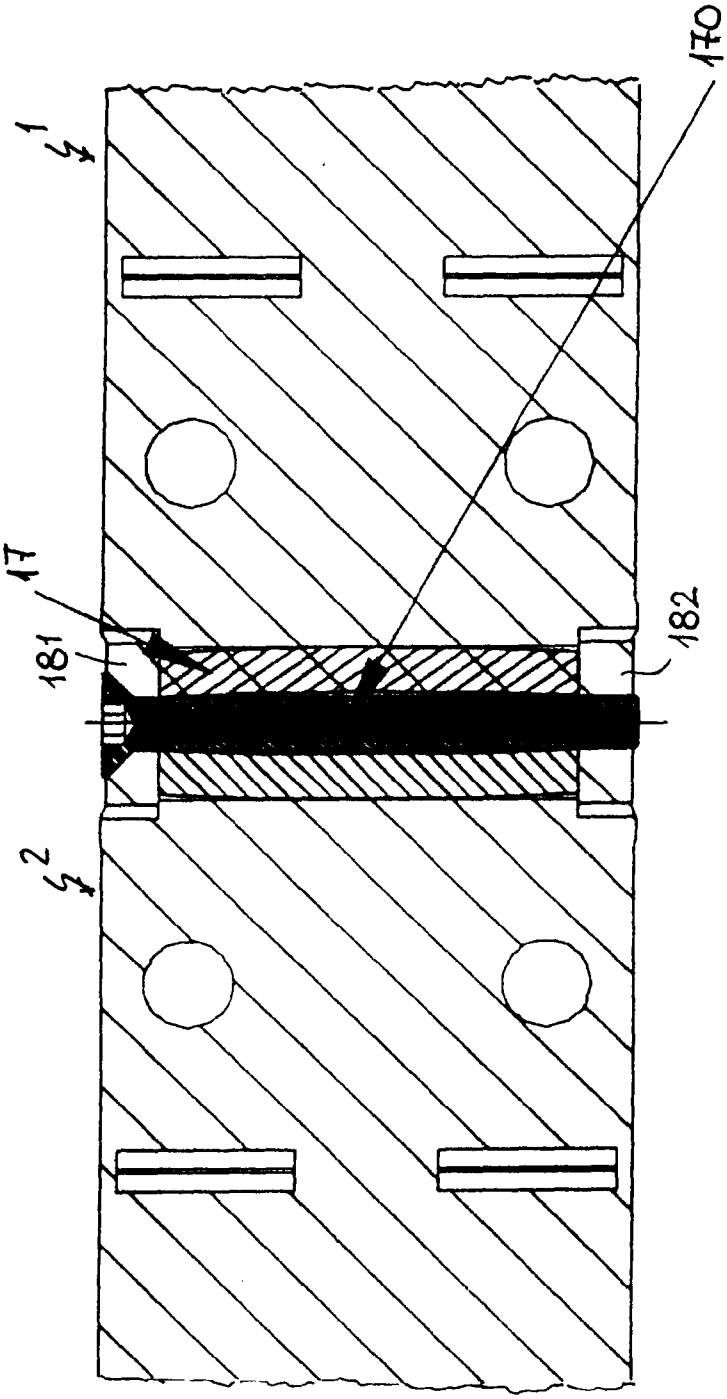


Fig. 13

INTERNATIONAL SEARCH REPORT

International application No
PCT/SI2018/000005

A. CLASSIFICATION OF SUBJECT MATTER
INV. A63C5/075 A63C9/00
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A63C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 2 285 457 A1 (SITAR FRANC [SI]) 23 February 2011 (2011-02-23) cited in the application paragraph [0016] - paragraph [0030]; figures 1,2, 6,7	1-9
A	EP 1 880 746 A2 (BELFROND MATTEO [IT]) 23 January 2008 (2008-01-23) paragraph [0049] - paragraph [0056]; figures 14,16	1-9
A	DE 299 20 755 U1 (SALOMON SA [FR]) 17 February 2000 (2000-02-17) page 3, line 20 - page 10, line 11; figures 2,3	1-9

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[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
8 June 2018	04/07/2018

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Murer, Michael

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INTERNATIONAL SEARCH REPORT

International application No
PCT/SI2018/000005

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 513 826 B1 (HANGL ANDREAS [CH]) 4 February 2003 (2003-02-04) cited in the application column 4, line 13 - column 11, line 21; figures 14-17 -----	1-9

1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/SI2018/000005

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		WO 0032284 A1	08-06-2000