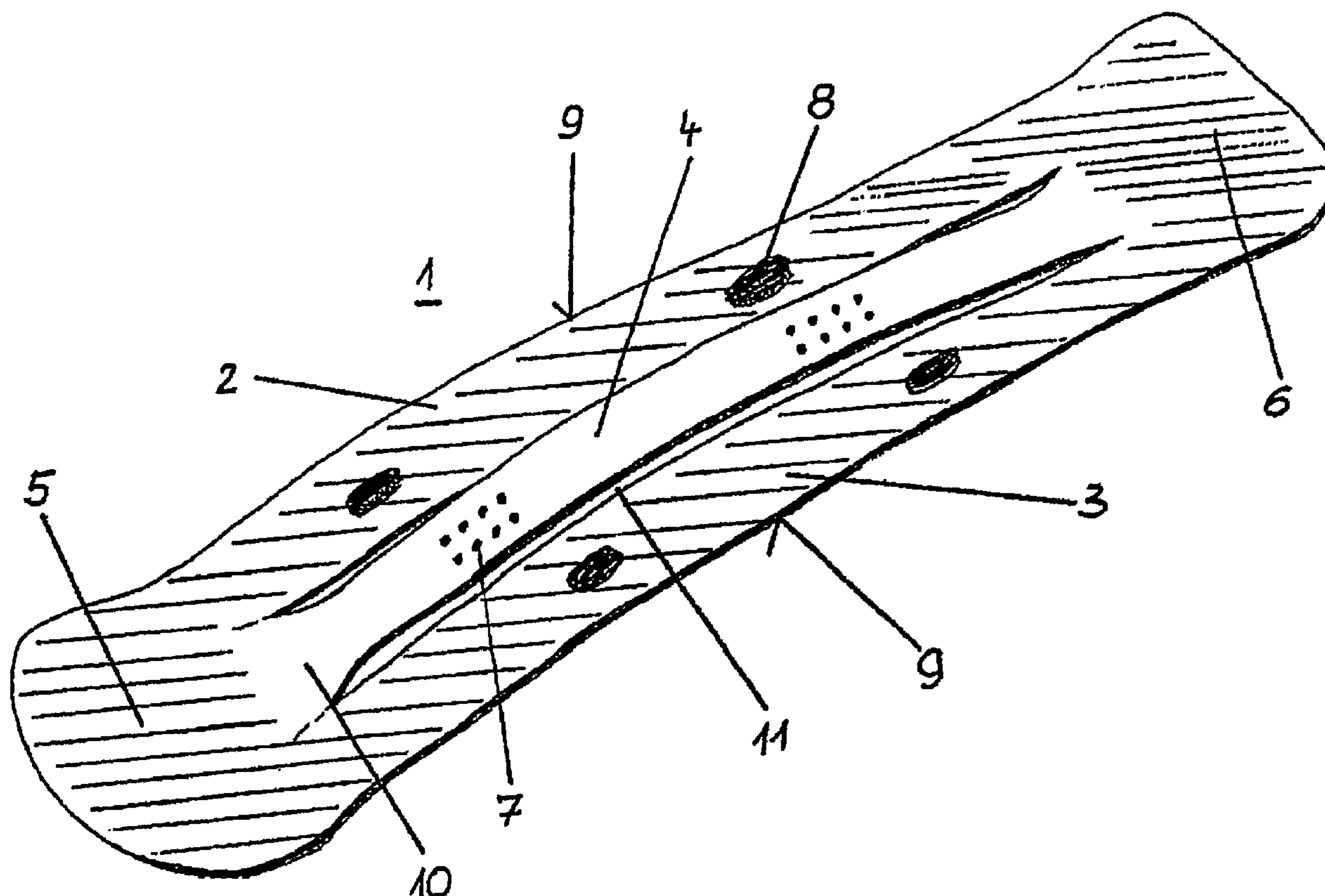




(86) Date de dépôt PCT/PCT Filing Date: 2004/04/16
(87) Date publication PCT/PCT Publication Date: 2004/11/04
(45) Date de délivrance/Issue Date: 2008/05/27
(85) Entrée phase nationale/National Entry: 2005/10/17
(86) N° demande PCT/PCT Application No.: DE 2004/000799
(87) N° publication PCT/PCT Publication No.: 2004/094009
(30) Priorité/Priority: 2003/04/19 (DE203 06 244.2)

(51) Cl.Int./Int.Cl. *A63C 5/03* (2006.01),
A63C 5/00 (2006.01), *A63C 5/044* (2006.01)
(72) Inventeur/Inventor:
KOSMEHL, PATRICK-ALEXANDER, DE
(73) Propriétaire/Owner:
KOSMEHL, PATRICK-ALEXANDER, DE
(74) Agent: SMART & BIGGAR

(54) Titre : PLANCHE A NEIGE
(54) Title: SNOWBOARD



(57) Abrégé/Abstract:

The invention relates to a snowboard having a divided gliding surface. Said snowboard comprises a one-part base, said base (10) consisting of two lateral gliding parts (2; 3) extending in the longitudinal direction of the snowboard (1) and a longitudinal bridge (4) provided between the gliding parts (2; 3) which are interlinked with the front area (5) and the rear area (6) of the snowboard (1).



ABSTRACT

The invention relates to a snowboard having a divided gliding surface. Said snowboard comprises a one-part base, said base (10) consisting of two lateral gliding parts (2; 3) extending in the longitudinal direction of the snowboard (1) and a longitudinal bridge (4) provided between the gliding parts (2; 3) which are interlinked with the front area (5) and the rear area (6) of the snowboard (1).

77916-6

1

Snowboard

The invention relates to a snowboard having a divided gliding surface.

In recent years, various solutions have become known which relate to the design but also to the technical feasibility of snowboards. These changes relate both to snowboards having the conventional construction in a one-piece form and to snowboards in a divided form.

Especially with respect to the design of snowboards having the divided design, the supporting structure and the flexibility of snowboards are to be improved, whereby this is based on the general realization that the flexibility of a snowboard has a considerable influence on the performance properties of a snowboard, taking into consideration that snowboarding takes place on variously formed runs. Furthermore, the properties of a snowboard during cornering are determined by its central narrowing.

The flexibility of a snowboard with respect to its upward lift, i.e. the spring resistance, which counters a snowboard when its longitudinal ends move upward or downward, has a considerable effect on the performance properties. When the snowboard glides flat on the snow in longitudinal direction, it must be ensured by a correctly measured flexibility that the snowboard carries out an upward curve with respect to the midsection of the snowboard in hollows in the ground with both longitudinal ends and a certain counter flexure on bumps or elevations.

On the one hand, the properties of a snowboard during cornering are determined by its narrowing - the midsection of the snowboard usually has a smaller width than the longitudinal ends of the snowboard - and, on the other hand, by the flexibility of the respective longitudinal edge inside the curve.

The snowboard is turned on edge during cornering, i.e. tipped sideward, so that only its longitudinal edge on the inside of the curve is still in contact with the snow, while the longitudinal edge on the outside of the curve is more or less lifted far off the snow.

Thus, DE 201 13 739 U1 describes a snowboard having a one-piece board body in which the board body has a slit extending essentially along its central axis, said slit extending from the rear end of the board up to at least its central area and in this way forms two separate sides which are connected to one another by the one-piece front area.

The provided slit divides the gliding surface of the snowboard partially into two separate gliding surfaces, which can have a positive effect with respect to the gliding resistance, however, the typical snowboard shape was changed due to the fact that the cut of the midsection was considerably reduced, so that this has a negative effect when cornering.

DE 198 20 619 A1 describes a snowboard having a divided gliding surface with which a better pressure distribution curve of the snowboard should be obtained in order to thus enable a sensitive and controlled snowboard ride.

The problem with this solution is that both divided gliding surfaces must of course be joined for snowboarding so that the desired advantages are indeed obtained. This is to be obtained by a spring-cushioning spacer element which is attached to the two gliding parts between the footplate and the gliding surface. This type of connection is both technically and economically very expensive, another type of connection of the snowboard to the sports shoe becoming necessary with this solution which differ in comparison to conventional binding designs and are very complicated in their construction.

Therefore, the object of the invention is to develop a snowboard having a divided gliding surface with which the ride properties,

77916-6

3

the straight running properties and cornering properties are improved.

According to an aspect of the invention, there is provided a snowboard having a divided gliding surface,
5 comprising a base, the base comprising two gliding parts and a longitudinal bridge provided between the gliding parts, lateral slots are provided between the gliding parts and the longitudinal bridge, wherein transitional sites of the longitudinal bridge to front and rear areas of the base are
10 curved.

The invention is thereby based on the realization that the properties of conventional snowboards with respect to their design, construction and manufacturing method which have proved to be successful in practice are retained to a
15 large extent, but the performance properties of the snowboard should be considerably improved in comparison to the known solutions.

Thus, a snowboard was created whose board consists of a base and the board is designed in such a way that it is
20 configured in its longitudinal form with lateral gliding parts, forming the gliding surfaces of the snowboard, and in the centre with a foothold surface in the form of a raised longitudinal bridge.

The invention includes that the gliding parts and
25 the longitudinal bridge are designed in such a way in the board that they go/pass over into a closed front piece or end piece in the front and rear area of the board, thus creating a one-piece snowboard with divided gliding surfaces.

77916-6

3a

In this case, special significance was attached to the fact that the snowboard created has or combines the advantages of a one-piece snowboard, so that the widths of the snowboard in the front and rear area correspond to those
5 of a conventional snowboard. It is within the scope of the invention that the snowboard has a narrowing in the centre which is formed by the longitudinal shape of the two gliding parts.

While the undersides of the gliding parts
10 represent the gliding surfaces of the snowboard, the foothold surface on which the athlete stands for snowboarding is formed by the longitudinal

bridge which is made with corresponding fixtures, e.g. inserts, to which conventional bindings are fastened. The longitudinal bridge is thereby designed at a distance, preferably of 3 cm to 5 cm, from the two lateral gliding parts, so that the two gliding surfaces are formed with their gliding parts which turn into the front and rear, completely flat gliding area of the snowboard.

The design of the snowboard with the raised longitudinal bridge has two essential advantages. On the one hand, therefore, the increase in flexibility of the snowboard which results in a positive effect on the performance properties and, on the other hand, in the reduction of the gliding resistance of a snowboard. This is accomplished by forming the divided gliding surfaces. The raised design of the longitudinal bridge not only requires an increase in the flexibility of the snowboard, but also an improved handling, in particular when cornering. The differences in height resulting between the longitudinal bridge and the two lateral gliding parts, the distance of the binding and the gliding parts, is balanced by providing spacer elements on the surfaces of the gliding parts in the area of the respective ski boot binding, said spacer elements having a degree of thickness which corresponds to the difference in height between the gliding parts and the longitudinal bridge. The spacer elements can also be firmly attached to the surfaces of the gliding parts by gluing, whereby, in a preferred embodiment, the spacer elements are arranged on the longitudinal bridge so as to be replaceable or adjustable in a manner similar to the fastening of ski boot bindings. The same fastening method is used in this case as for the spacer elements, which has a positive effect both from a manufacturing and economic point of view.

In a further embodiment, the differences in height between the gliding parts and the longitudinal bridge can be balanced by placing spacer elements on the ski boot bindings, on their bearing surfaces in the toe and heel area, which are arranged at a distance which corresponds to the difference in height between the longitudinal bridge and the gliding parts of the snowboard.

This also meets the requirements or wishes of snowboarders who would like to snowboard in various foot positions.

At the same time, when using the snowboard, the pressure on the gliding surfaces are increased and the stability improved.

According to the invention, the variability of the foot positions on the snowboard is also obtained by providing, on or in the longitudinal bridges, guide rails in longitudinal direction of the snowboard, the ski boot bindings being accommodated in said guide rails and which can then be adjusted in the guide rails in longitudinal direction of the snowboard.

The one-piece design of the snowboard thus created also has advantages with respect to its production. Thus, this snowboard can be made of a plastic, of fibers or even of wood, it also being possible to make the snowboard of other materials, in particular, materials which positively affect the construction of the snowboard during production both from a manufacturing and economic point of view, are taken into consideration.

Overall, a snowboard according to the invention was created with which the gliding resistance between the gliding surfaces of the snowboard and the course to be travelled is reduced and the smooth run of the snowboard is substantially increased. This snowboard combines the properties of three types of snowboards which can be ridden in particular as a raceboard, both as an allround board and also in deep snow with the appropriate width.

The invention will be described in greater detail in the following with reference to an example of an embodiment in association with the drawing. The drawing shows the snowboard in a perspective view.

The configuration of the snowboard 1 in its entirety can be clearly seen in the illustration of the attached drawing and it is shown that the snowboard 1 is designed as a one-piece board. Thus, the snowboard 1 consists of two gliding parts 2 and 3 which

are formed on the two longitudinal sides of the snowboard 1. The gliding parts 2, 3 are a specific distance from one another. This is formed by the arrangement and design of the longitudinal bridge 4 which extends from the front area 5 of the snowboard 1 to the rear area 6 of the snowboard 1 and is constructed in such a way that the longitudinal bridge 4 is formed at a specific distance, a height of preferably up to 5 cm, to the surfaces of the gliding parts 2, 3.

The gliding parts 2, 3 have an inner curvature on their outer edges, said inner curvature forming the central narrowing 9 of the snowboard 1. The surface of the longitudinal bridge 4 serves as a foothold surface for the snowboarder, inserts 7, on which the ski boot bindings are braced, being provided in the area of the ski boot bindings to be fastened. In the area of the insert 7, seen in cross direction of the snowboard 1, height-equalizing supporting blocks 8 are provided on the surfaces of the gliding parts 2, 3, in such a way that the bindings or the ski boots of the snowboarder lie and are supported on the spacer elements 8 with the tips and heels of the ski boot. In this way, it is ensured that the foot movements of the snowboarder are transmitted directly to the gliding parts of the snowboard 1 and undesirable tipping motions avoided.

77916-6

7

CLAIMS:

1. A snowboard having a divided gliding surface, comprising a base, the base comprising two gliding parts and a longitudinal bridge provided between the gliding parts,
5 lateral slots are provided between the gliding parts and the longitudinal bridge, wherein transitional sites of the longitudinal bridge to front and rear areas of the base are curved.
2. The snowboard according to claim 1, wherein the
10 longitudinal bridge is structured as a support surface for a snowboarder, the longitudinal bridge having a height of no more than 5cm from surfaces of the gliding parts.
3. The snowboard according to claim 2 wherein the longitudinal bridge has a height of between 3 to 5 cm from
15 the surfaces of the gliding parts.
4. The snowboard according to any one of claims 1 to 3, wherein the gliding parts are configured with a central narrowing in their longitudinal directions and wherein spacer elements are arranged on the surfaces of the
20 gliding parts so as to be fixed or adjustable and replaceable.
5. The snowboard according to claim 4, wherein the spacer elements are removably connected to the gliding parts by inserts or guide rails.

SMART & BIGGAR

OTTAWA, CANADA

PATENT AGENTS

