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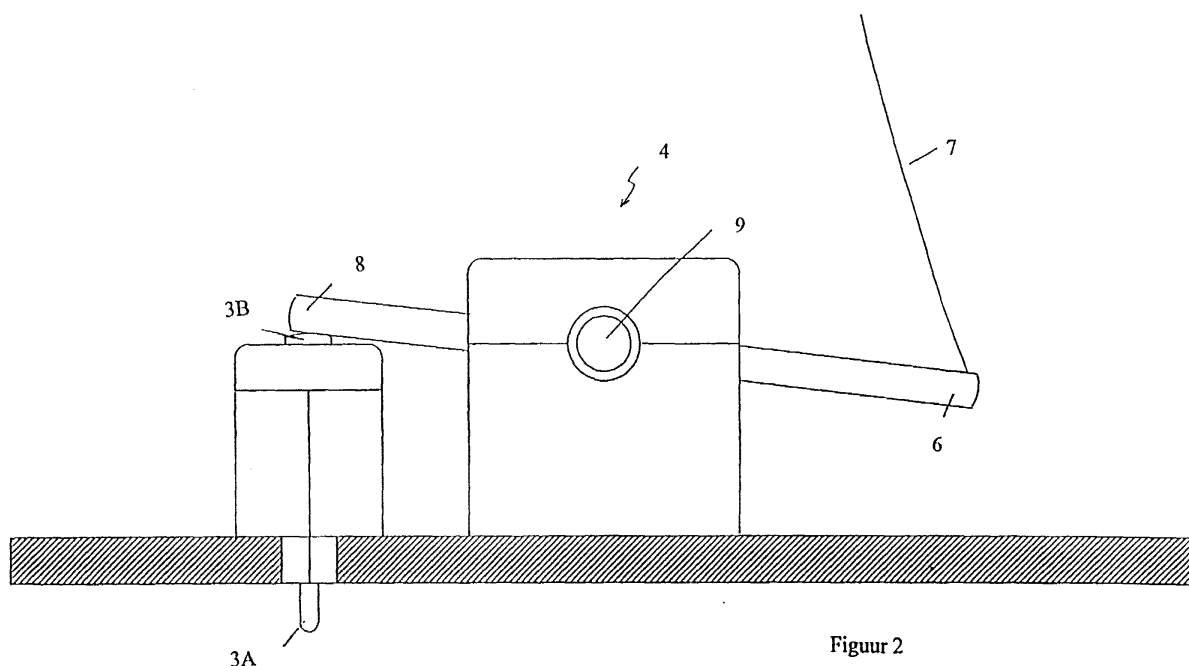
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(54) **Snowboard with braking system**

(57) Described is a snowboard provided with a braking system. The braking system comprises a brake member which produces a different braking force in different positions and which co-acts with drive means. The drive means can be controlled manually so that the

different positions of the brake member are achieved.

The drive means comprise at least a first and a second engaging point, wherein a first engaging point is coupled to a manually controllable member and wherein a second engaging point can co-act with the brake member.



Figuur 2

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Description

[0001] The present invention relates to a snowboard provided with a braking system.

[0002] Snowboards provided with a braking system are known. A drawback of the known systems however is that they can only be operated with difficulty and in limited circumstances. Braking systems are thus known which only come into operation when the shoe is removed from the binding of the snowboard.

[0003] The present invention has for its object to provide a snowboard provided with a braking system which can be operated continuously and to any desired extent.

[0004] The present invention provides for this purpose a snowboard as according to the preamble which is characterized in that the braking system comprises a brake member which produces a different braking force in different positions and which co-acts with drive means, wherein the drive means can be controlled manually so that the different positions of the brake member are achieved.

[0005] Because the snowboard according to the present invention is provided with a brake member which can be placed in different positions, any desired degree of braking effect can be obtained, which provides a great advantage. If a snowboarder wishes to reduce his speed somewhat, he can thus actuate the drive means lightly so that a slight braking effect is achieved. When approaching a ski-lift, the snowboarder can bring about a more forceful actuation so that he comes to a standstill. In addition to the above stated advantages, the danger of accidents is reduced considerably with the variable braking system.

[0006] The drive means particularly comprise at least a first and a second engaging point, wherein a first engaging point is coupled to a manually controllable member and wherein a second engaging point can co-act with the brake member.

[0007] The snowboarder can herein hold the manually controllable member, for instance in the form of a cord, in the hand or fastened round the leg, so that operation of the braking system can be readily effected by pulling on the member.

[0008] The first engaging point and the second engaging point are advantageously placed relative to a shaft present centrally relative thereto such that a lever action occurs when the drive means are operated.

[0009] A relatively great effect can hereby be achieved with the exertion of only little force.

[0010] When actuated, the brake member preferably protrudes through the running surface of the snowboard.

[0011] Because the brake member protrudes through the running surface itself, an effective braking action takes place. The brake member can for instance comprise one or more pin-like members. Preferably however, the brake member comprises a plate-like member.

[0012] The plate-like member is advantageously

placed transversely of the length direction of the snowboard.

[0013] The braking effect is further optimized by such a placing.

5 **[0014]** In an advantageous embodiment the brake member protrudes centrally through the running surface of the snowboard.

[0015] The snowboard hereby remains on a relatively fixed course, also during braking, and no undesired change of direction occurs.

10 **[0016]** The present invention will be further elucidated hereinbelow with reference to the annexed drawing, in which:

15 figure 1 shows a side view of a part of a snowboard with a braking system arranged thereon, wherein substantially no actuation hereof is taking place;

figure 2 shows a similar side view, wherein actuation of the braking system is taking place; and

20 figure 3 shows a brake member according to the present invention.

25 **[0017]** The figures are purely schematic and not drawn to scale. Corresponding components are designated in all the figures with the same reference numerals.

[0018] Figure 1 shows a side view of the braking system according to the present invention.

30 The braking system comprises a brake member (3) which co-acts with drive means (4). The embodiment of brake member (3) is further elucidated in figure 3. Shown here is that the brake member is constructed from different components. Brake member (3) comprises a plate-like member (3A) which protrudes through the running surface of the snowboard into the snow during a braking operation and brings about a braking effect.

This plate-like member (3A) is coupled to actuating member (3B) with interposing of a spring coupling (3C).

35 **[0019]** Brake member (3) can be driven using drive means (4). These drive means comprise a first engaging point (6) which is coupled to a cord (7) for manual operation. This cord can be held in the hand by the snowboarder or be fastened round his leg. On the other side the drive means comprise a second engaging point (8) which can co-act with the actuating member (3B) of brake member (3). The engaging points (6, 8) can pivot over a shaft 9. When the engaging point (6) moves upward because a pulling movement is performed on cord 7, the engaging point (8) moves downward so that the brake member is pressed downward and protrudes through the running surface of the snowboard. This latter situation is shown in figure 2. A braking effect is brought about in this situation. In the embodiment shown in figure 2 the plate-like member (3C) is rounded on the underside. In a preferred embodiment however, the plate-like member (3C) takes a flat form on the un-

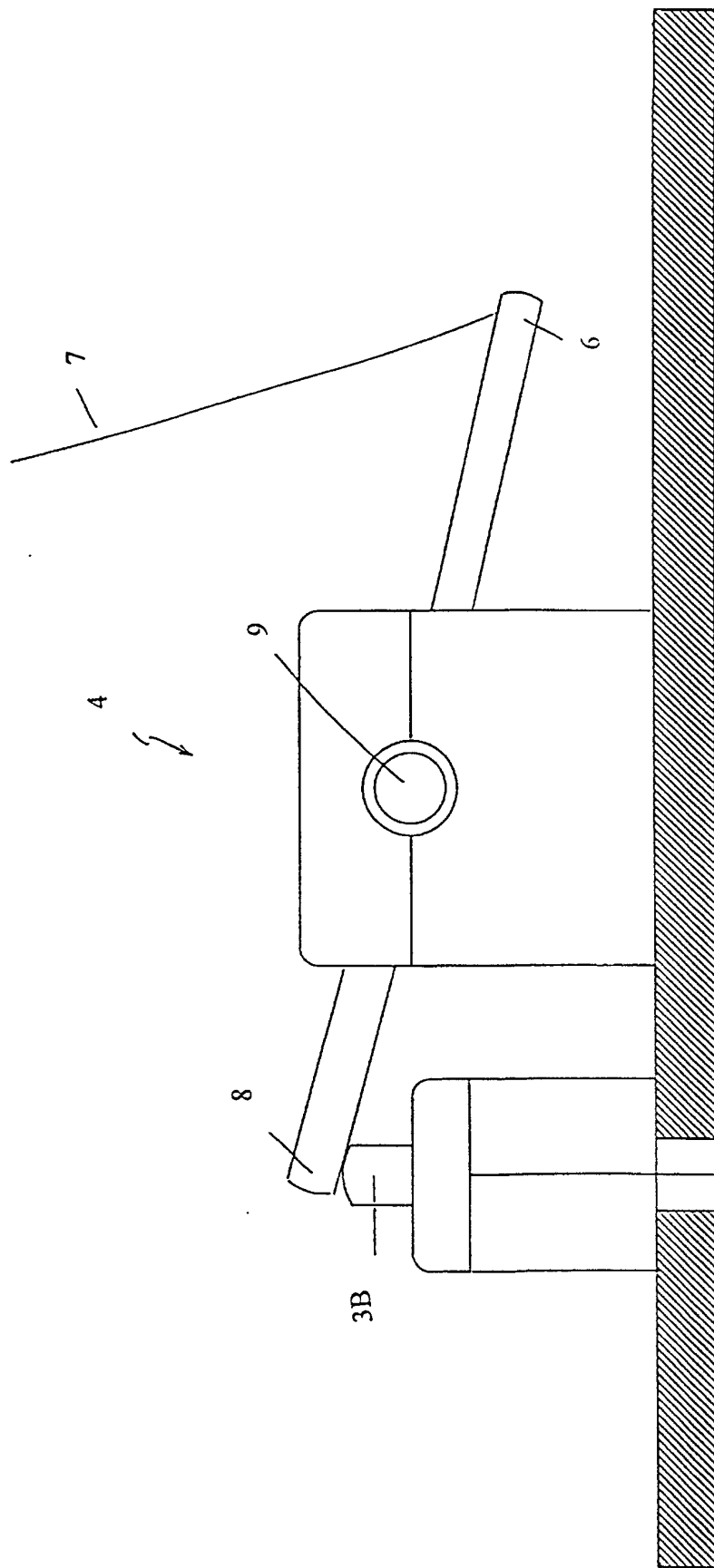
derside.

[0020] Because the brake member (3) comprises a spring coupling (3C), the brake member (3) will be returned to the original position shown in figure 1 when the cord is released, wherein no braking effect occurs. 5

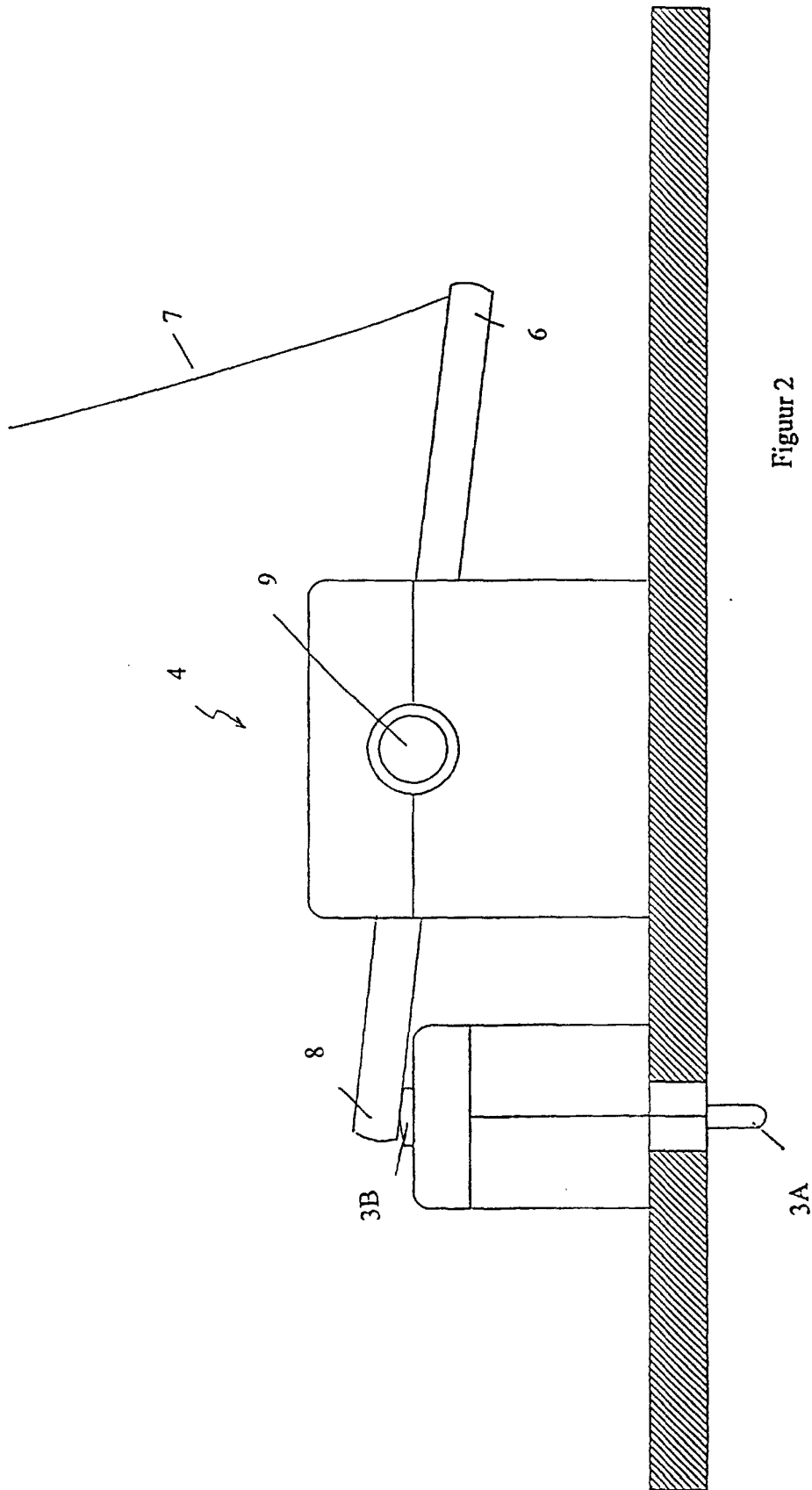
[0021] By exerting pulling movements of differing force, the user of the snowboard can place the brake member in different positions and thereby produce different braking effects. 10

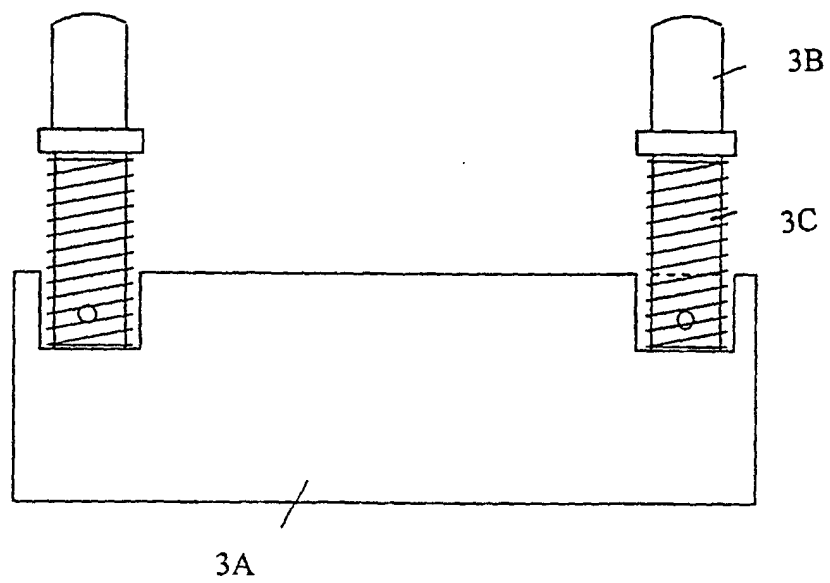
Claims

1. Snowboard provided with a braking system, characterized in that the braking system comprises a brake member (3) which produces a different braking force in different positions and which co-acts with drive means (4), wherein the drive means (4) can be controlled manually so that the different positions of the brake member are achieved. 15 20
2. Snowboard as claimed in claim 1, characterized in that the drive means comprise at least a first and a second engaging point, wherein a first engaging point (6) is coupled to a manually controllable member (7) and wherein a second engaging point (8) can co-act with the brake member (3). 25
3. Snowboard as claimed in claim 1 or 2, characterized in that the first engaging point (6) and the second engaging point (8) are placed relative to a shaft (9) present centrally relative thereto such that a lever action occurs when the drive means are operated. 30 35
4. Snowboard as claimed in one or more of the foregoing claims, characterized in that when actuated the brake member protrudes through the running surface of the snowboard. 40
5. Snowboard as claimed in claim 4, characterized in that the brake member comprises a plate-like member. 45
6. Snowboard as claimed in claim 5, characterized in that the plate-like member is placed transversely of the length direction of the snowboard. 50
7. Snowboard as claimed in one or more of the claims 4-6, characterized in that the brake member protrudes centrally through the running surface of the snowboard. 55



Figuur 1





Figuur 3



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EUROPEAN SEARCH REPORT

Application Number
EP 00 20 4213

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	US 5 816 602 A (HAYASHI) 6 October 1998 (1998-10-06) * column 3, paragraph 8; figures 1,2 *	1,4	A63C7/10
A	CH 652 038 A (PINO) 31 October 1985 (1985-10-31) * page 2, column 2, paragraph 9 - page 3, column 1, paragraph 3; figure 1 *	1,5,6	
A	DE 90 02 865 U (LOOK SA) 17 May 1990 (1990-05-17) * figures 3-5 *	1,5,6	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			A63C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 28 February 2001	Examiner Steegman, R
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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28-02-2001

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 5816602	A	06-10-1998	JP	10314364 A	02-12-1998
CH 652038	A	31-10-1985	NONE		
DE 9002865	U	17-05-1990	FR	2660568 A	11-10-1991