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(72) Inventors:  
• **Vanhoucke, Jimmy**  
**8870, Izegem (BE)**  
• **Willemyns, Pieter**  
**8870, Izegem (BE)**

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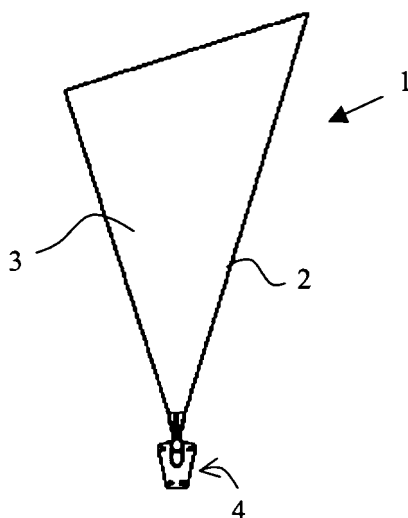
(74) Representative: **Ostyn, Frans**  
**K.O.B. NV**  
**Kennedypark 31 c**  
**8500 Kortrijk (BE)**

(71) Applicant: **Umbrosa NV**  
**8870 Izegem (BE)**

(54) **Sunshade system**

(57) The present invention relates to a sunshade system (1) in which said system (1) comprises a sunshade screen (3), provided in a screen profile (2), and a screen profile holder (4), in which the screen profile (2) is freely rotatable with respect to the screen profile holder (4). As

the screen profile (2) is freely rotatable, the profile (2) can be rotated and tilted in a large number of positions. In this manner, it is possible to create shade throughout the day in one specific spot without, for example, having to move the chair or reclining chair.



**Fig. 1**

## Description

**[0001]** The present invention relates to a sunshade system.

**[0002]** There are numerous reasons why people put up a sunshade, such as creating shade in sunny weather, providing protection against UV radiation, preventing furniture from discoloration or purely for fun.

**[0003]** The most widely known sunshade systems are parasols. The most important types of parasols are the upright parasol, the tiltable parasol and the arched parasol.

**[0004]** The upright parasol is the most common parasol. This parasol is supported by an upright in the centre of the parasol. The ribs of the parasol extend radially from this upright. Such parasols are placed in a sturdy holder.

**[0005]** The tiltable parasol strongly resembles the upright parasol, the difference being that a tilting mechanism is provided between the canvas and upright. This makes it possible to set the angle of inclination of the parasol to a limited number of positions. In contrast to the previously mentioned type, the canvas of the tiltable parasol does not have to be permanently kept in a strictly horizontal position.

**[0006]** The arched parasol, also referred to as suspended parasol, is supported on one side by means of a curved arm. This model offers the advantage that the upright does not form an obstacle. Such parasols can usually be rotated through 360°, so that shade can be created where it is needed.

**[0007]** Although the above systems have proved to be reliable, it is an object of the present invention to provide an alternative for these systems.

**[0008]** The object of the invention is achieved by providing a sunshade system in which said system comprises a sunshade screen, provided in a screen profile, and a screen profile holder, in which the screen profile is freely rotatable with respect to the screen profile holder. As the screen profile is freely rotatable, the screen profile can be rotated and tilted in a large number of positions. In this manner, it is possible to create shade throughout the day in one specific spot without, for example, having to move the chair or reclining chair. The screen profile holder is preferably designed to be placed on the ground and is not intended to be fitted on a wall.

**[0009]** The sunshade screen is preferably made of PVC, canvas or shade cloth. Other materials from which the screen can be made are: acrylic, polyester, textylene, polypropylene and nylon.

**[0010]** According to a preferred embodiment of the sunshade system according to the invention, the screen profile holder comprises positioning means in order to place the screen profile in a desired position. The positioning means preferably comprise a ball hinge. Such a ball hinge makes it possible to place the screen profile in a great number of positions. In a particular embodiment, said ball hinge can be moved counter to a spring force. The ball hinge is preferably movable between a

first position, in which the ball hinge (and thus also the screen profile connected to the ball hinge) is held in a specific position, and a second position, in which it is possible to move the ball hinge (and thus also the screen profile connected to the ball hinge) to another position (by means of, for example, tilting or rotating).

**[0011]** Preferably, the screen profile holder comprises a baseplate. By arranging the screen profile holder on a baseplate, the screen profile can create shade from a fixed spot on the ground.

**[0012]** In a more preferred embodiment of the system according to the invention, the positioning means comprise a locking mechanism which is provided in order to keep the screen profile in a set position. The locking mechanism preferably comprises pressure means which are provided in order to press the ball hinge against blocking means. In particular, said pressure means comprise a spring and a bearing plate provided with a hollowing in which the ball hinge rests.

**[0013]** In a particularly preferred embodiment of the system according to the invention, the screen profile holder comprises activating means in order to move the screen profile into a desired position. The activating means unlock the locking mechanism of the positioning means and the screen profile can then be moved from a first position to a next (for example second, third or fourth) position. Once the screen is in another position, the locking mechanism is locked again. In particular, said activating means comprise a pedal, by means of which the user can move the screen profile to another position in a very simple manner.

**[0014]** In a particular embodiment of the sunshade system according to the invention, the screen profile is made of aluminium. More particularly, the screen profile is made of stainless steel or glass fibre. These materials (aluminium, stainless steel, glass fibre) have the advantage that the screen profile can be made lightweight and rustproof.

**[0015]** According to a most particular embodiment of the system according to the invention, the screen profile is of leaf-shaped design. This offers the advantage that an elongate shadow can be created.

**[0016]** In order to explain the properties of the present invention further and to illustrate additional advantages and features thereof, a more detailed description of the sunshade system according to the invention is given below. It should be clear that nothing in the following description can be interpreted as limiting the scope of protection for this invention claimed in the claims.

**[0017]** In this description, reference numerals are used to refer to the attached drawings, in which:

- Fig. 1 and Fig. 2: show a number of representations of the sunshade system according to the invention;
- Fig. 3: shows a number of positions in which the screen profile can be placed;
- Fig. 4: shows a front view of the screen profile holder;
- Fig. 5: shows a top view of the screen profile holder;

- Fig. 6: shows a cross section of the screen profile holder.

[0018] The sunshade system (1) according to the present invention is an innovation in the field of sun protection. It is a shadow concept which is inspired by nature and creates shade for one to two persons.

[0019] The system according to the invention as represented in Figs. 1 to 3 comprises a sunshade screen (3), provided in a screen profile (2), and a screen profile holder (4), in which the screen profile (2) is freely rotatable with respect to the screen profile holder (4). This makes it possible to create shade in one specific spot for the entire day without, for example, having to move a chair or reclining chair. It is possible to rotate the screen profile (2) so that it follows the sun (rotatable), as it were, and the profile (2) can, in addition, as is illustrated in Fig. 3, be adjusted to the position of the sun (tiltable), depending on the season. The screen profile holder is preferably designed to be placed on the ground. To this end, the screen profile holder is attached to a baseplate (6). As a result, the shadow is created from a fixed spot on the ground.

[0020] The sunshade screen (3) is made of PVC, canvas, shade cloth, acrylic, polyester or another suitable material and is fitted tightly onto the screen profile (2). The shape and dimensions of the screen (and thus also of the screen profile) vary from application to application. Figs. 1 and 2 show a number of possible embodiments. In addition to these embodiments, other shapes, such as for example square, pentagonal, etc. are also possible.

[0021] The screen profile holder (4) (see Figs. 4, 5 and 6) comprises a ball hinge (5) which makes it possible to place the screen profile (2) in a great number of positions by means of rotation and/or tilting. The ball hinge (5) can be moved counter to a spring force between a first position, in which the ball hinge (5) (and thus also the screen profile (2) connected thereto) is held in a set position, and a second position, in which it is possible to position the ball hinge (5) (and thus also the screen profile (2) connected thereto) into another position (by means of for example tilting or rotation.)

[0022] In order to change the position of the screen profile (2), the screen profile holder (4) comprises activating means (7) in the form of a pedal. The user can easily change the position of the screen profile (2) by depressing the pedal, for example by means of his foot. In this manner, the locking mechanism of the ball hinge (5) is unlocked. Obviously, other operating means or activating means (7), such as for example a handle, push-button and the like, are covered by the scope of protection of the invention.

[0023] The locking mechanism, as illustrated in Fig. 6, comprises pressure means (8) which are provided in order to press the ball hinge (5) against blocking means (9) provided in the screen profile holder and to keep the ball hinge (5) in its first position. The pressure means comprise, in particular, a spring (8) and a bearing plate

provided with a hollowing in which the ball hinge rests. The blocking means (9) may consist of one or more protuberances provided on the inside of the screen profile holder (4). The locking mechanism of the ball hinge (5) is unlocked by compressing the spring (8) by means of the pedal (7). As a result thereof, the bearing plate (10) which is provided with a recess (hollowing) in which the ball hinge (5) rests, together with the ball hinge (5), moves down (to the second position of the ball hinge (5)) and there is no contact between the ball hinge (5) and the blocking means. At that moment, the user can change the position of the screen profile (2) by rotation or tilting. Once the screen has reached its desired position, it has to be locked in that position. To this end, the pedal is released and the bearing plate (10), together with the ball hinge, will move back up as a result of the force which is exerted by the spring (to the first position of the ball hinge) and press the ball hinge (5) back against the blocking means (9).

## Claims

1. Sunshade system (1), **characterized in that** said system (1) comprises a sunshade screen (3), provided in a screen profile (2), and a screen profile holder (4), in which the screen profile (2) is freely rotatable with respect to the screen profile holder (4).
2. Sunshade system (1) according to Claim 1, **characterized in that** the screen profile holder (4) comprises positioning means in order to place the screen profile (2) in a desired position.
3. Sunshade system (1) according to Claim 2, **characterized in that** the positioning means comprise a ball hinge (5).
4. Sunshade system (1) according to Claim 3, **characterized in that** said ball hinge (5) can be moved counter to a spring force.
5. Sunshade system (1) according to one of the preceding claims, **characterized in that** the screen profile holder (4) comprises a baseplate (6).
6. Sunshade system (1) according to one of the preceding claims, **characterized in that** the screen profile holder (4) comprises activating means (7) in order to move the screen profile (2) into a desired position.
7. Sunshade system (1) according to Claim 6, **characterized in that** said activating means (7) comprise a pedal.
8. Sunshade system (1) according to one of the preceding claims, **characterized in that** the screen profile (2) is made of aluminium.

9. Sunshade system (1) according to one of the preceding claims, **characterized in that** the screen profile (2) is of leaf-shaped design.

10. Sunshade system (1) according to one of the preceding claims, **characterized in that** the sunshade screen (3) is made of PVC, canvas or shade cloth.

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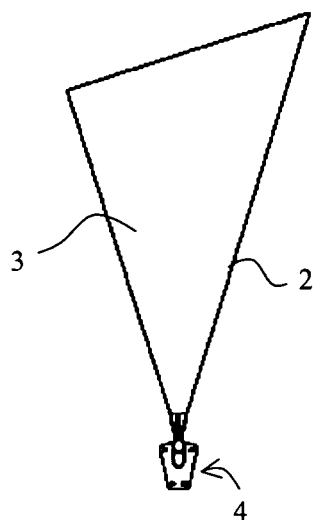
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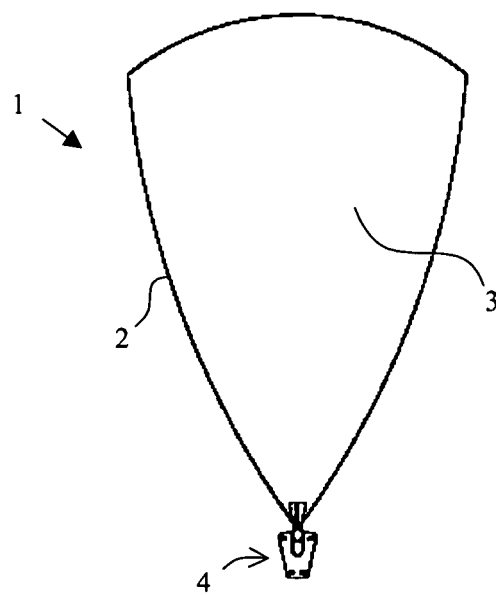
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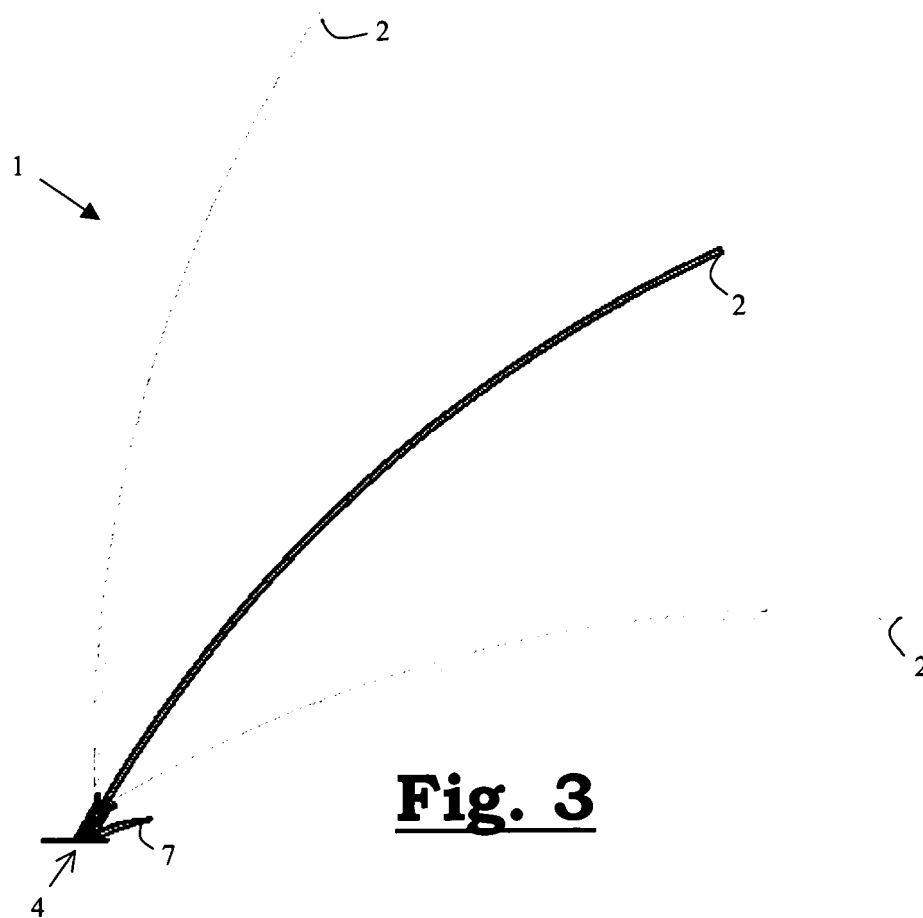
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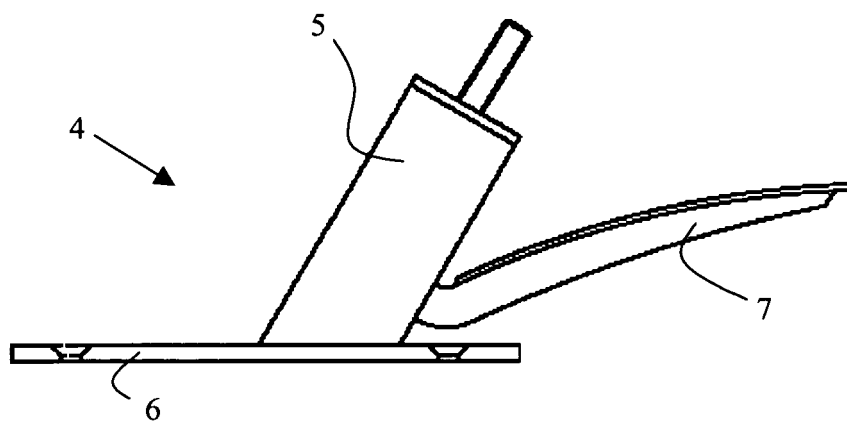
**Fig. 1**



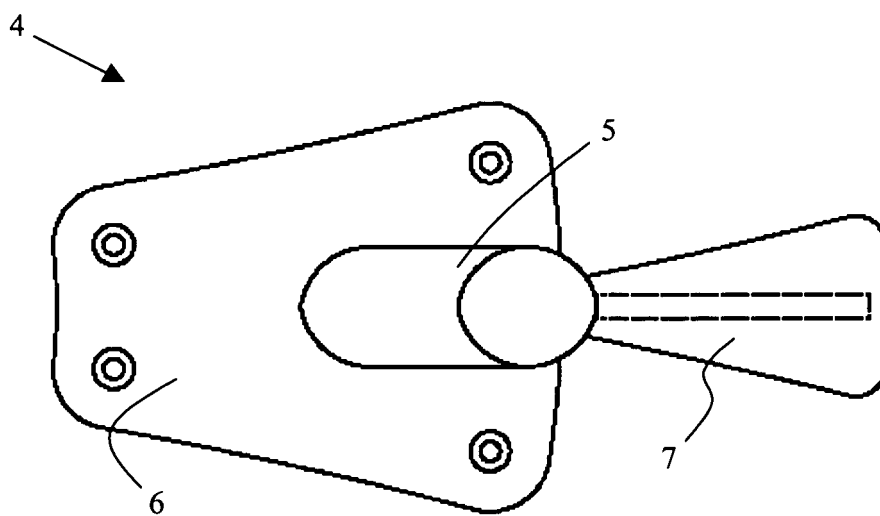
**Fig. 2**



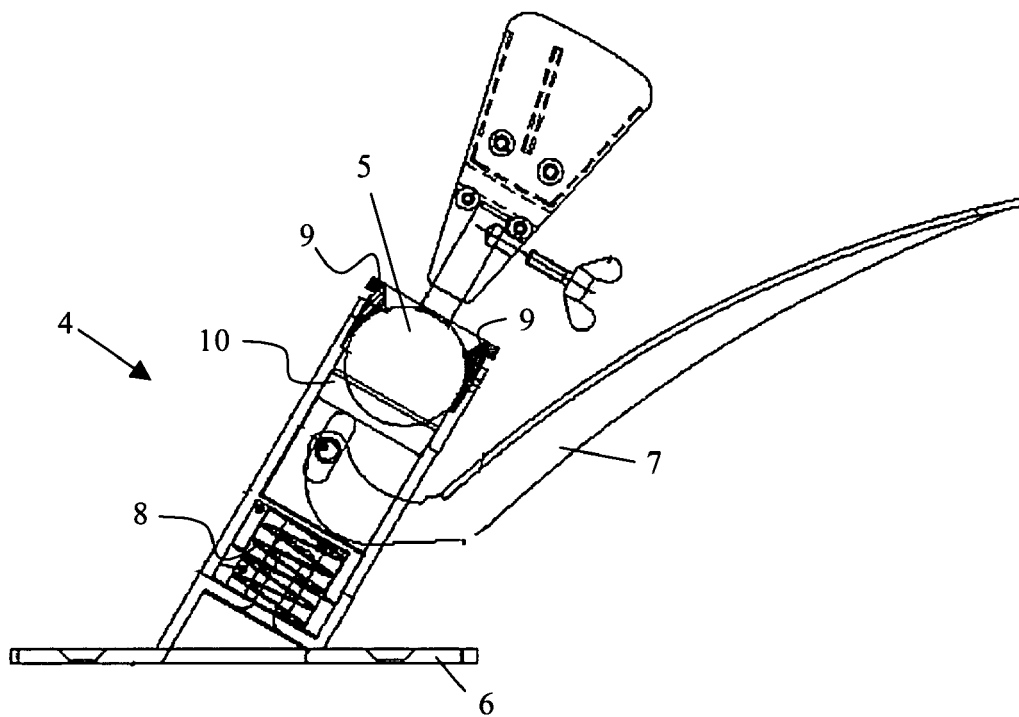
**Fig. 3**



**Fig. 4**



**Fig. 5**



**Fig. 6**



## EUROPEAN SEARCH REPORT

Application Number  
EP 08 16 3316

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 22 December 2008	Examiner Dinescu, Daniela
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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 &amp; : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03.82 (P04C01)



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

EP 08 16 3316

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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22-12-2008

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