(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 3 473 786 A1**

(12) EUROPEAN PATENT APPLICATION

(43) Date of publication:
24.04.2019 Bulletin 2019/17

(21) Application number: **18200646.0**

(22) Date of filing: **16.10.2018**

(51) Int Cl.:
E04H 12/22 *(2006.01)* ***A47G 5/00*** *(2006.01)*
E01F 7/02 *(2006.01)* ***E04H 15/00*** *(2006.01)*

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME
Designated Validation States:
KH MA MD TN

(30) Priority: **17.10.2017 NL 2019750**

(71) Applicant: **Beschutt**
3371 NZ Hardinxveld-Giessendam (NL)

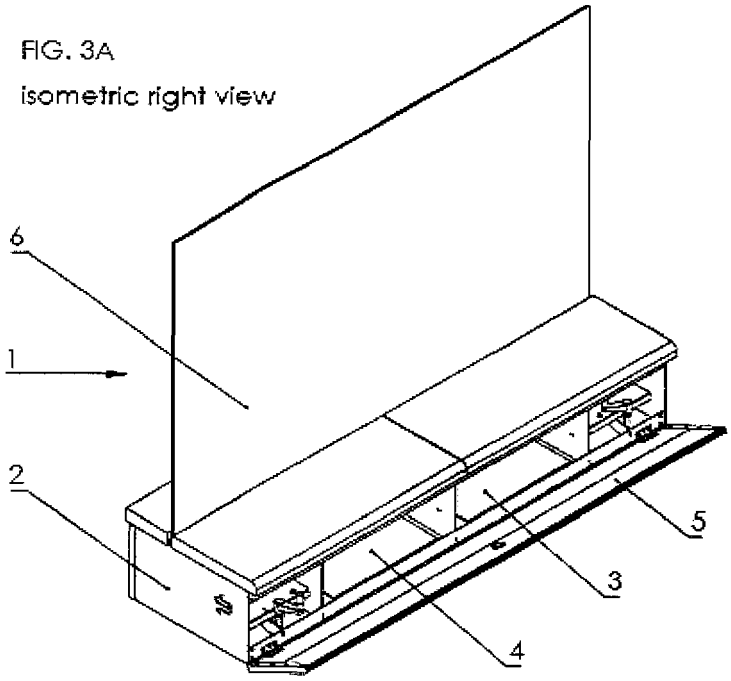
(72) Inventor: **Wemmers, Gerit**
3371 NZ Hardinxveld-Giessendam (NL)

(74) Representative: **Van Breda, Jacobus**
Octrooibureau Los & Stigter B.V.
Weteringschans 96
1017 XS Amsterdam (NL)

(54) MOVABLE WINDSHIELD

(57) Movable windshield (1) equipped for use in a garden or a terrace or similar, comprising a base (2) which is embodied to receive ballast, and a shield (6) mounted on top of the base (2), wherein the base (2) is provided with wheels (7, 8) to provide movability to the windshield (1), and wherein the base (2) is arranged as a hollow case (2'), and the hollow case (2') has openings (9) at its underside through which part of the wheels (7, 8) reach that are mounted inside of the case (2'), and that the case (2') is provided with a lid (5) which is openable and closable so as to enable introduction of ballast into the case (2') when the lid (5) is open, and prevent that the ballast and the wheels (7, 8) are in sight when the windshield (1) is in use with the lid (5) closed.

FIG. 3A
isometric right view



EP 3 473 786 A1

Description

[0001] The invention relates to a movable windshield equipped for use in a garden or a terrace or similar, comprising a base which is embodied to receive ballast, and a shield mounted on top of the base, wherein the base is provided with wheels to provide movability to the windshield and wherein the base is arranged as a hollow case.

[0002] Such a movable windshield is on the market as shown at https://www.bol.com/nl/p/mobiel-windscherm/9200000068043508/ wherein the shield is transparent. This is however not essential; the shield may also be non-transparent. The case of the known movable windshield has an open top so as to easily receive ballast material such as stones, water or soil. The wheels are mounted below the case and are at all times visible. The known movable windshield has a sturdy structure, but a disadvantage of this known windshield is that it applies brakes on the wheels that necessitate that the wheels are always in sight so as to provide accessibility of the brakes.

[0003] It is an object of the invention to provide a movable windshield which is securely positionable without being sensitive to unintended movement when the wind speeds reach relatively high values.

[0004] It is another object of the invention to improve the general aesthetic appearance of the windshield, and in particular to arrange that the wheels are hardly visible.

[0005] These and other objects and advantages of the invention which will become apparent from the following disclosure, are provided by a windshield with the features of one or more of the appended claims.

[0006] In a first aspect of the invention the hollow case has openings at its underside through which part of the wheels reach that are mounted inside of the case, and that the case is provided with a lid which is openable and closable so as to enable introduction of ballast into the case when the lid is open, and prevent that the ballast and the wheels are in sight when the windshield is in use with the lid closed. In this construction of the windshield of the invention the wheels can be mounted substantially out of sight, and also the ballast is out of sight when the movable windshield is in use.

[0007] Preferably the lid is a side lid, but it is also possible that the lid is provided as an openable top cover.

[0008] For providing resistance against unintended movement of the windshield of the invention, several embodiments are proposed.

[0009] In a first embodiment of the movable windshield of the invention the wheels are up-and-down movable with reference to the case. This enables that the wheels can be retracted when the windshield is at its intended location, and the case which forms the packing for the ballast, can come to rest directly on the ground. Preferably then the wheels are each mounted on a spindle that is fixedly mounted in the case for moving the wheels up or down with reference to the case.

[0010] In a second embodiment of the movable windshield of the invention each of the wheels is fixed with reference to the case in a frame that is mounted in the case, and that the frame is provided with an up-and-down movable spindle that can reach through the openings at the underside of the case. Usually each wheel has an individual frame. In this second embodiment it is preferable that each spindle is provided with a foot for resting on the ground. This means that when the windshield is at its intended location, the spindle with the foot can be lowered from the respective frames carrying the wheels, so that their contact with the ground is lost and taken over by the feet at the underside of the spindles of the frames.

[0011] The spindles can be motor driven but in order to save on costs it is preferable that the spindles are manually operable. It is feasible that the spindles are operated from the outside of the case, particularly but not only when the spindles are motor driven. In the case of motor driven spindles actuation of the motors for the spindles can be done wireless-ly. When not equipped with a motor, the spindles can also be manually operated from the outside by a dedicated tool which can be introduced into the case.

[0012] In order to promote the aesthetics of the windshield of the invention it is preferable that when the spindles are not operable from the outside of the case, the spindles are accessible and operable only after opening of the lid.

[0013] The invention will hereinafter be further elucidated with reference to the drawing of an exemplary embodiment of an apparatus according to the invention that is not limiting as to the appended claims.

[0014] In the drawing:

- figure 1A and figure 1B show a front view and top view respectively of a movable windshield according to the invention;
- figure 2 shows a cross-section of the movable windshield according to the invention along the line B - B in figure 1B; and
- figure 3A and figure 3B show an isometric right view and isometric left view respectively of the windshield of the invention.

[0015] Whenever in the figures the same reference numerals are applied, these numerals refer to the same parts.

[0016] Making first reference to figure 1A and figure 1B it shows a movable windshield 1 in a front view and a top view respectively. Such a movable windshield 1 is commonly used in a garden or a terrace or similar to provide protection against the wind at a variable location where the protection is needed. For this purpose the windshield 1 is movable and comprises a base 2 which is embodied as a hollow case 2' to receive ballast. The ballast can be received in closable compartments 3 and 4. For closing off the compartments 3 and 4 an openable and closable lid 5 is provided at a side 2'' of the base 2.

Further there is a shield 6 mounted on top of the base 2, and the base 2 is provided with wheels 7, 8 to provide movability to the windshield 1 as is more clearly shown in figure 2. The wheels 7, 8 are mounted inside of the case 2'.

[0017] As already mentioned the base 2 comprises closable compartments 3 and 4, which means that the base 2 is arranged as a substantially hollow case 2', wherein next to the compartments 3, 4 the hollow case 2' further has openings 9 at its underside for the wheels 7, 8 that are mounted inside of the case 2'.

[0018] The already mentioned lid 5 is openable and closable so as to enable introduction of ballast into the case 2', in particular into the compartments 3, 4 when the lid 5 is open, and which lid 5 prevents that the ballast or the wheels 7, 8 are in sight when the windshield 1 is in use with the lid 5 closed.

[0019] In order to provide the movable windshield 1 of the invention with resistance against undesired movement when subjected to high wind speeds, several embodiments are proposed.

[0020] In an embodiment that is not shown in the figures the wheels 7, 8 may be arranged to be up-and-down movable with reference to the case 2'. In that situation it is preferable that the wheels 7, 8 are each mounted on a spindle that is fixedly mounted in the case 2' for moving the wheels up or down with reference to the case 2'.

[0021] In another embodiment that is shown in the figures the wheels 7, 8 are each fixed with reference to the case 2' in an individual frame 11, 12 for each wheel, and that the frame 11, 12 of each wheel is provided with an up-and-down movable spindle 13, 14.

[0022] In both embodiments mentioned above it is preferable that the spindles 13, 14 are manually operable.

[0023] As is clearly shown in figure 2 advantageously the spindle 13, 14 of each wheel 7, 8 is provided with a foot 15, 16 for resting on the ground. When the feet 15, 16 of the spindles 13, 14 rest on the ground, the wheels 7, 8 are lifted from the ground and unintended movement of the movable windshield 1 is then effectively prevented.

[0024] As will be clear for the skilled person from figure 2 the spindle 13, 14 of each wheel 7, 8 is accessible and operable only after opening of the lid 5.

[0025] Finally reference is made to figures 3A and 3B which show the windshield 1 of the invention in an isometric right view and an isometric left view respectively. According to these figures it is clear that the wheels that arrange for the movability of the movable windscreen 1 are practically not visible. Likewise when the lid 5 of the base 2 of the windshield 1 is closed, the ballast placed in the compartments 3, 4 is also out of sight.

[0026] Although the invention has been discussed in the foregoing with reference to an exemplary embodiment of the movable windshield of the invention, the invention is not restricted to this particular embodiment which can be varied in many ways without departing from the invention. The discussed exemplary embodiment shall therefore not be used to construe the appended claims strictly in accordance therewith. On the contrary the embodiment is merely intended to explain the wording of the appended claims without intent to limit the claims to this exemplary embodiment. The scope of protection of the invention shall therefore be construed in accordance with the appended claims only, wherein a possible ambiguity in the wording of the claims shall be resolved using this exemplary embodiment.

Claims

1. Movable windshield (1) equipped for use in a garden or a terrace or similar, comprising a base (2) which is embodied to receive ballast, and a shield (6) mounted on top of the base (2), wherein the base (2) is provided with wheels (7, 8) to provide movability to the windshield (1), and wherein the base (2) is arranged as a hollow case (2'), **characterized in that** the hollow case (2') has openings (9) at its underside through which part of the wheels (7, 8) reach that are mounted inside of the case (2'), and that the case (2') is provided with a lid (5) which is openable and closable so as to enable introduction of ballast into the case (2') when the lid (5) is open, and prevent that the ballast and the wheels (7, 8) are in sight when the windshield (1) is in use with the lid (5) closed.

2. Movable windshield according to claim 1, **characterized in that** the lid (5) is a side lid.

3. Movable windshield according to claim 1 or 2, **characterized in that** the wheels (7, 8) are up-and-down movable with reference to the case (2').

4. Movable windshield according to claim 2 or 3, **characterized in that** the wheels (7, 8) are each mounted on a spindle that is fixedly mounted in the case (2') for moving the wheels (7, 8) up or down with reference to the case (2').

5. Movable windshield according to claim 1, **characterized in that** the wheels (7, 8) are fixed with reference to the case (2') in a frame (11, 12) that is mounted in the case (2'), and that the frame (11, 12) is provided with an up-and-down movable spindle (13, 14) that can reach through the openings (9) at the underside of the case (2').

6. Movable windshield according to claim 4 or 5, **characterized in that** the spindle (13, 14) is manually operable.

7. Movable windshield according to claim 5 and claim 6, **characterized in that** the spindle (13, 14) is provided with a foot (15, 16) for resting on the ground.

8. Movable windshield according to any one of claims 4 - 7, **characterized in that** the spindle (13, 14) is accessible and operable after opening of the lid (5).

FIG. 1A
front view

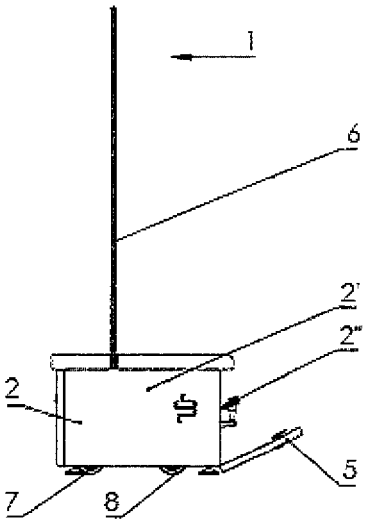


FIG. 1B
top view

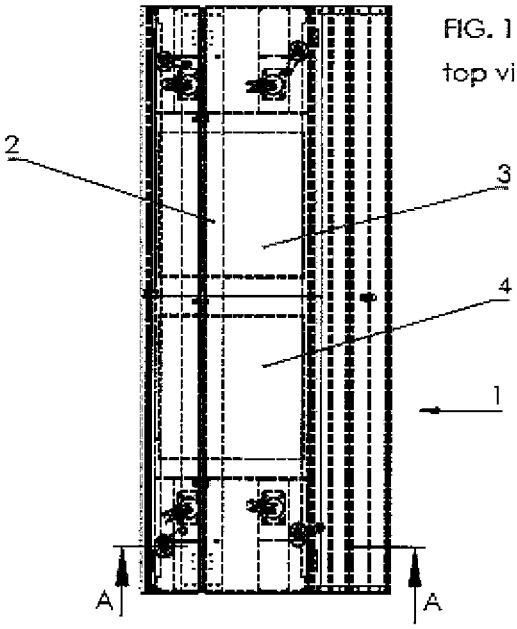


FIG. 2
SECTION A-A
SCALE 1 : 5

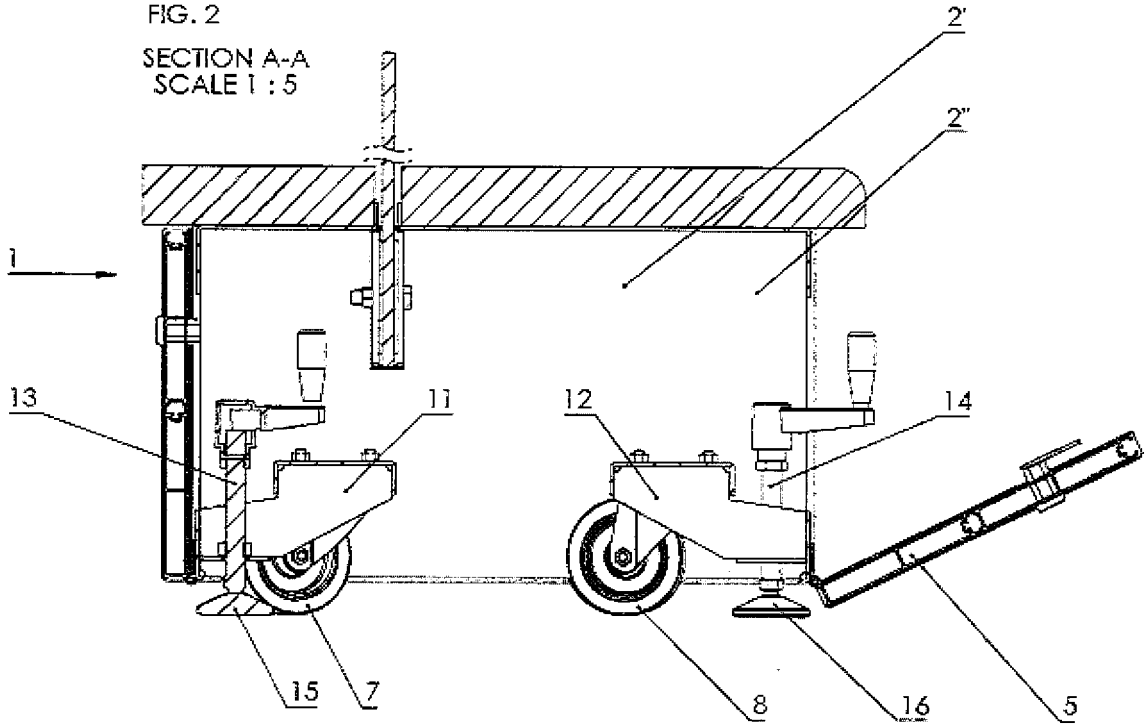
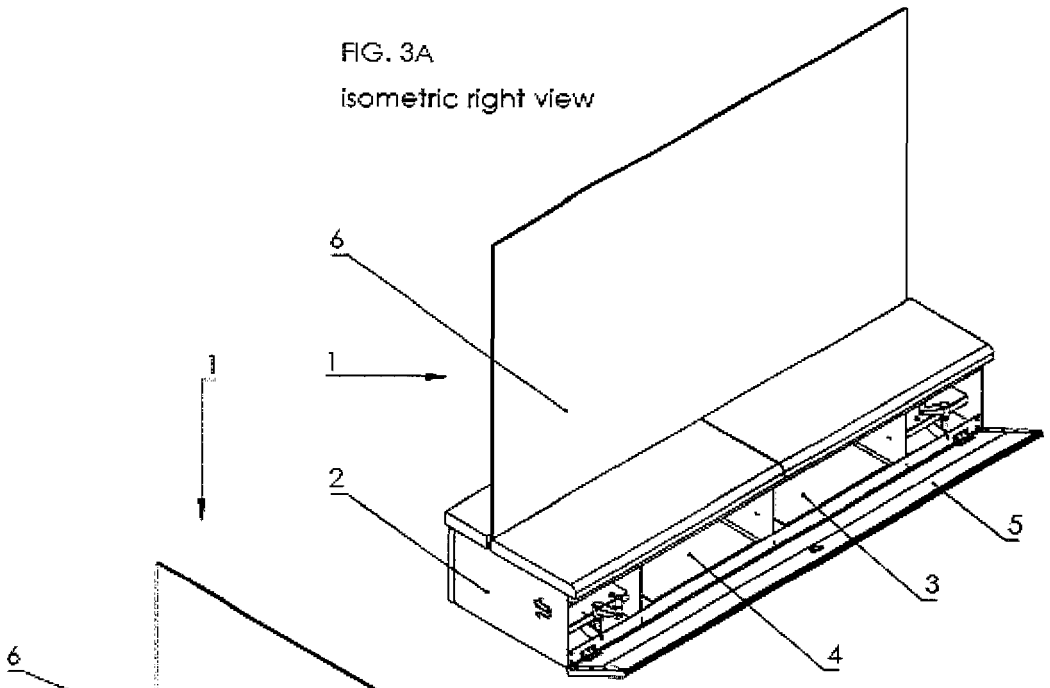


FIG. 3A
isometric right view



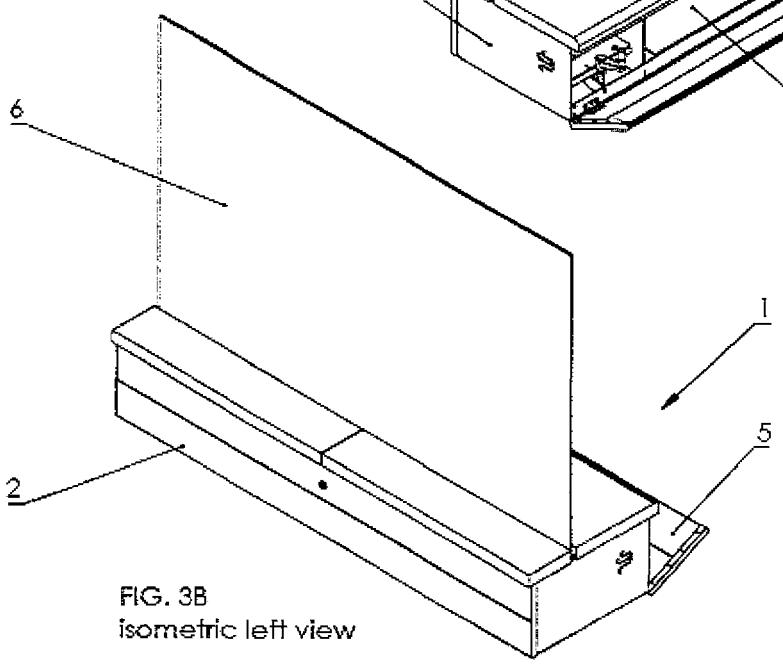


FIG. 3B
isometric left view

Europäisches Patentamt
European Patent Office
Office européen des brevets

EUROPEAN SEARCH REPORT

Application Number
EP 18 20 0646

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 98/43230 A1 (MARKETING DISPLAYS INC [US]; GREWE RONALD E [US]) 1 October 1998 (1998-10-01)	1-3	INV. E04H12/22 A47G5/00 E01F7/02 E04H15/00
A	* page 4, line 13 - page 11, line 8; figures 1-6,9,10 *	4,6,7	
X	EP 1 120 771 A1 (STATEN PRODUCTDEVELOPMENT B V [NL]) 1 August 2001 (2001-08-01)	1-4,6,7	
A	* column 3, line 39 - column 5, line 17; figures 1-5B *	5,8	
A	GB 2 494 430 A (DICKSON IAN [GB]) 13 March 2013 (2013-03-13) * abstract; figures 1,2A,2B,5-7,9-12 *	1	
A	DE 93 13 263 U1 (HOFMANN GMBH & CO GEB [DE]) 23 December 1993 (1993-12-23) * page 4, line 30 - page 5, line 25; claims 1,6,8; figures 1-3 *	1,3	

TECHNICAL FIELDS SEARCHED (IPC)

E04H
A47G
E01F
E04B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	27 February 2019	Stefanescu, Radu

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

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 18 20 0646

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
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

27-02-2019

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9843230 A1	01-10-1998	AT 289701 T	15-03-2005
		AU 6769198 A	20-10-1998
		DE 69829103 D1	31-03-2005
		EP 0906608 A1	07-04-1999
		EP 1450335 A2	25-08-2004
		ES 2237837 T3	01-08-2005
		JP 3509880 B2	22-03-2004
		JP 2000512038 A	12-09-2000
		JP 2004046187 A	12-02-2004
		US 5875578 A	02-03-1999
		WO 9843230 A1	01-10-1998
EP 1120771 A1	01-08-2001	AT 274224 T	15-09-2004
		DE 60104912 T2	08-09-2005
		EP 1120771 A1	01-08-2001
		NL 1014213 C2	31-07-2001
GB 2494430 A	13-03-2013	EP 2753773 A1	16-07-2014
		GB 2494430 A	13-03-2013
		WO 2013034893 A1	14-03-2013
DE 9313263 U1	23-12-1993	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82