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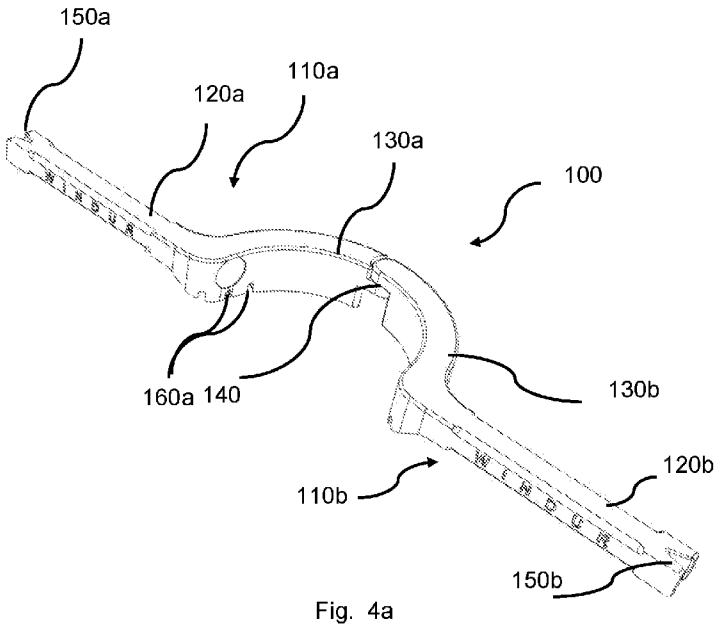

Fig. 4a

(57) Abstract: There is disclosed a device (100) for distancing a flag rope (300) from a flag pole (400) in order to reduce unwanted noise, said device (100) comprises: - two device elements (110a, 110b) for connecting to the flag pole (400) and receiving the flag rope (300) at a distance from the flag pole (400); and - a rotatably adjustable hinge connection (140) provided between the two device elements (110a, 110b), wherein the device (100) comprises an elastic strap (180) for connection in one end to a first recess (160a) of the first element (110a) of the device (100) and in an opposite end to a second recess (160b) of the second element (110b) of the device (100) so that the device and the elastic strap may form closed loop around the flag pole (400).

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A DEVICE FOR DISTANCING FLAG ROPES FROM A FLAG POLE

Field of the invention

The present invention relates to a device for distancing a flag rope from a flag pole in order to reduce unwanted noise. Said device comprises one or more device elements for receiving the flag rope and a rotatably adjustable hinge connection. The invention further relates to a method for installing such device to a flag pole.

Background of the invention

Measures for reducing noise of a flag or a flag rope slapping and bumping towards a flag pole are known. Keeping the rope and/or flag closer and tightened to the flag pole is the most common measure in reducing the noise, by e.g. wrapping the flag rope once or more times around the pole, before securing the rope to a cleat, firmly securing the rope around the pole in order to keep it closer and tighter to the flag pole.

Further examples of known measures are foam bumpers wrapped around the pole in order to reduce the noise of the flag and/or flag rope, covers for e.g. snap hooks, retainer rings to keep the rope on the flagpole, covering grommets or eyelets being holes with metal rings with different kind of foams, covers etc.

US3826223A describes a flag clasp for silencing a flag pole halyard in windy conditions. The clasp comprises a first and second body member each having a hook with which the first and second body member is rotated one to another in order to align the hooks and thus forming an opening securing eye. The first and second body member each having a first and second aperture for encircling an inner and outer halyard and terminating the hook in an eyelet of the flag to secure the flag. The flag clasp is thus located at the top of the flag pole. The halyard is thus not secured and prevented from clinching into the flag pole in the area between the flag and the cleat where the halyard is tied off and thus creating noise in windy condition.

DE000004141688 describes a flag hoist for flag poles where cable pulls of the flag are running within the flag hoist in order to reduce the noises caused by the beating of the cable pulls. The flag hoist is described to be located either internal or external the flag pole. In both embodiments the cable pulls are covered and thus protected and not exposed to wind along the flag pole. The flag hoists require intervention with the flag pole by

screws, welds etc. When the flag hoist is situated e.g. externally on the flag pole, the flag pole loses its slender and streamlined appearance.

Additional relevant background information can be found in the following patent documents:

US 5738031 A;
US 5113776 A; and
JPH 0610987 A.

Noise from a flag and/or a flag rope slapping around the flag pole in the wind is a constant source of irritation and frustration for neighbours and other close by. The noise is produced by the flag pole rope or flag snap hook constant clinking and slapping towards the flag pole even at low wind conditions and increases at increasing wind. The known measures reduce the noise, but as the wind is increasing the rope will be exposed to constantly increasing forces and is not able to withstand the occurring bouncing that eventually will hit towards the flag pole. The rope mooring being dynamically exposed to the wind will slack over time giving more room for bouncing towards the flag pole, and there will be a need for re-secure the rope to the flag pole. Flag hoists being retrofitted onto the flag pole requires complex measures in order to be installed, welding, the making of screw holes, screwing etc. and the risk of rust, wear and tear to both the pole and the weld or screws. Integrated flag hoists require intricate and complicated manufacturing of flag poles.

There is thus a need to address the above challenges.

Summary of the invention

In the following and throughout the specification, the following terms means:

The term “flag pole” used throughout this document is used to describe the pole or staff which in one end is secured to a fundament/ground.

The term “flag rope” used throughout this document is used to describe the rope, line, cable or halyard to hoist a flag and secure and keep a flag to a flag pole.

When term “flag” is used throughout this document is should also be understood to include a pennant or other suitable objects or linings to be hoisted by means of a flag rope to the top or the flag pole.

A main object of the present invention is to provide a device for reducing the noise of a flag and/or flag rope bouncing toward a flag pole.

Another object of the present invention is to provide a secure connection of a device for noise reduction to a flag pole.

Yet another object of the present invention is to provide a device for noise reduction for retrofitting onto a flag pole.

A further object of the present invention is to provide a device for noise reduction reducing noise even at heavy wind conditions.

The objects are achieved by the provision of a device as defined in the preamble of the independent claims, having the features of the characterizing portions of the independent claims. A plurality of embodiments, variants or alternatives of the invention are defined by the dependent claims.

According to a first embodiments of the present invention, there is provided a device for distancing a flag rope from a flag pole in order to reduce unwanted noise according to claim1,

In embodiments, said one or more device elements comprises a flag rope bar or strut and a curved element, wherein the flag rope bar or strut is fixedly connected to one of the end portions of the curved element.

In embodiments, the flag rope bar or strut is arranged perpendicularly to the flag pole when the device is installed.

In embodiments, said device comprises a first and second device element.

In embodiments, the two device elements are forming two mirrored device elements.

In embodiments, the flag rope bar or strut comprises an end having an open recess for receiving a flag rope, said end located on the opposite end of where the curved element is connected to the flag rope bar or strut.

In embodiments, the open recesses of the ends are having a V-shape, a shape of a half circle, half oval, half square or any other suitable shapes for receiving a flag rope.

In embodiments, the adjustable connection is adjustable to a flag pole having a diameter ranging from 60 mm to 200 mm.

In embodiments, the adjustable connection is adjustable to a flag pole having a diameter ranging from 70 mm to 190 mm.

In embodiments, the adjustable connection is adjustable to a flag pole having a diameter ranging from 80 mm to 180 mm.

In embodiments, the device comprises at least one first and second recess arranged in rounded transitions between the curved elements and the flag rope bar or strut.

In embodiments, the device comprises circular indents arranged in the rounded transitions between the curved elements and the flag rope bar or strut.

The adjustable device connection comprises an elastic strap connected in one end to a first recess of the first element of the device and in an opposite end to the second recess of the second element of the device.

According to a second aspect of the present invention, there is provided a method according to claim 12.

The present invention relates to a device for distancing a flag rope from a flag pole in order to reduce noise from the flag rope slapping and bumping towards the flag pole, typically in windy weather. The device is to be installed at the flag pole in reachable distance above a fastening point or cleat for securing the flag rope to the flag pole.

The device should be installed at the opposite side of the fastening point or cleat, providing a secure connection of the device onto the flag pole, the rope pressing the device towards the flag pole. The device is installed a distance above the cleat, preferably at a location at the flag pole measured from the centre or midpoint of the cleat to a length corresponding to the length of the device and an additional length of maximum 5 cm. The length of the device is measured from one outer point or end of the device to another other outer point or end of the device. The flag rope shall be threaded in suitable receivers of the device, which, when the device is installed, is located a distance from the flag pole. In order to string a flag pole, a flag rope is threaded from the top of the flag pole, the ends of the flag rope are tied in the ends in order to form a loop of the flag rope. Before hoisting a flag or pennant, the flag or pennant is connected to the flag rope loop and then hoisted to the top of the flag pole by pulling the flag rope. When the flag has reached the top of the

flag pole, the flag rope is tied to a cleat. Even when no flag is hoisted, the flag rope will be tied to the cleat for securing the flag rope. Before or after tying the flag rope to the cleat, the flag rope is threaded onto end parts of the bars or struts of the device of the invention, the bars or struts extending perpendicularly out from the flag pole when the device is installed. The flag rope being in a tightened state, further securing the device to the flag pole. The flag rope is by means of the device thus kept a distance from the flag pole, such that, when exposed to wind, it will not reach to slap or bump onto the flag pole. The device shall preferably be installed at the flag pole from the opposite side of where the cleat is positioned.

The device comprises at least one device element comprising a flag rope bar or strut for receiving the flag rope and projecting approximately perpendicularly out from the flag pole when the device is installed and a curved element for embracing the flag pole. The flag rope bar or strut protrudes out of one end part of the curved element and comprises a hook for receiving the flag rope when the device is installed. The flag rope bar or strut is preferably forming an approximately straight portion, and the edge formed between the flag rope bar or strut and the curved element is preferably forming a rounded edge. The flag rope bar or strut may optionally form a curved portion, where the flag rope bar or strut is preferably curved in opposite direction of the curved element.

The free end of the flag rope bar or strut comprises a hook for receiving the flag rope when installed. The hook preferably being V-shaped or in the shape of a half circle, half oval, half square or the like, such that the flag rope is safely kept in place and will not easily jump out of the hook.

In a preferred embodiment, the device comprises two elements, the curved element for embracing the flag pole being in the shape of at least a quarter of a circle, and the flag rope bar or strut protrudes out of one end of said quarter of a circle. The two elements constitute two mirrored elements engageable in a rotatable, hinged connection at the free ends of the quarter of a circle, the two quarter of a circle of each element forming at least a half circle when connected.

The device in the preferred embodiment is constituting an adjustable hinge fastening device formed to embrace flag poles of different diameters, the flag pole having an approximately circular cross section. The diameter of the flag pole may range from 60 mm to 200 mm, more preferably from 80 mm to 170 mm and more preferably from 90 mm to 160 mm. When the device embraces the flag pole at a maximum diameter, holding a closed

position, the two flag rope bars or struts are more or less aligned, pointing in opposite directions out from the flag pole, fitted for the largest diameter. When installed onto poles of smaller diameter, the device is installed in order to embrace the flag pole at a larger extent. The two flag rope bars or struts deviating from the aligned position, encountering each other, as the device embraces the smaller pole, holding a closed position. The device is adapted to hold the closed position until it is forced to an open position. An advantage of holding the flag rope on two bars/struts extending out on opposite sides of the flag pole, compared to having only one arm/strut extending out from the pole, is that it improves the load case on the device and flag pole.

In an optional embodiment, the device comprises one flag rope bar or strut, the first part for embracing the flag pole is in the shape of at least a semicircle or a shape between a semicircle and a full circle, able to be clicked onto the flag pole. The device is in such embodiment is fitted with a fixed radius of said circle and suitable for one certain flag pole diameter.

The device may optionally be further secured to the flag pole by means of an elastic strap, and thus dampening vibrations from the device to the flagpole. The device further comprises recesses for receiving the elastic strap. The recesses are preferably located in the transition between the first and second part of the at least one flag rope bar or strut, wherein each transition comprises one or more recesses. The recesses are preferably located in the rounded edge between the first and second part of the at least one flag rope bar or strut. In the preferred embodiment having two flag rope bars or struts, the elastic strap is fixed to one of the recesses of the first device element and stretched over to one of the recesses of the second device element. Further, circular indents for receiving rubber pads, e.g. such used on furniture, are located in the transition between the first and second part of the at least one flag rope bar or strut, wherein each transition comprises one or more circular indents. The rubber pads further reduce vibrations and resonances between the device and the flag pole.

The device is replaceable installable onto flag poles of different diameters. The elastic strap may be retrofitted to the device in order to withstand variances of the flag pole diameters and withstand wind even in areas exposed to variable and extreme wind conditions.

Description of the figures

Embodiments of the present invention will now be described, by way of example only, with reference to the following figures, wherein:

Figure 1 shows schematically a prior art of a flag pole comprising a flag hoist.

Figure 2a shows schematically a front view the device according to the invention installed on a flag pole with a flag hoisted in the top of the flag pole.

Figure 2b shows schematically and in perspective a close up of the device installed on the flag pole.

Figure 3a shows schematically and in perspective a tilted view of the device installed on the flag pole.

Figure 3b shows schematically and in perspective a view tilted slightly from a top view of the device installed onto the flag pole.

Figure 4a shows schematically and in perspective the device according to the invention.

Figure 4b shows schematically and in perspective the device according to the invention seen from below.

Figure 5 shows schematically and in perspective the device 100 prior to being connected to the flag pole 400. The device 100 holding an open position.

Figure 6 shows schematically and in perspective the device according to the invention installed on the flag pole, a device located on right side of the pole is shown to illustrate the distance from the cleat to the installed the device, and

Figure 7 shows schematically and in perspective the device according to the invention with V-shaped open recesses to secure the rope and circular indents for installing rubber pads.

Description of preferred embodiments of the invention

The following description of the exemplary embodiments refers to the accompanying drawings. The drawings illustrate exemplary embodiments of the invention configured to be installed at flag poles. The exemplary embodiments disclosed in the drawings should not be understood as a limitation to the scope of protection of the invention merely to illustrate certain aspects of the invention.

The same reference numbers in the different drawings identify the same or similar elements. The following detailed description does not limit the invention. Instead, the scope of the invention is defined by the appended claims.

Reference throughout the specification to “one embodiment” or “an embodiment” means that a particular feature, structure or characteristic described in connection with an embodiment is included in at least one embodiment of the subject matter disclosed. Thus, the appearance of the phrases “in one embodiment” or “in an embodiment” in various places throughout the specification is not necessarily referring to the same embodiment. Further particular features, structures or characteristics may be combined in any suitable manner or in one or more embodiments.

Figure 1 shows schematically a prior art of a flag pole 400 comprising flag hoist for flag poles where cable pulls of the flag 500 are running within the flag hoist in order to reduce the noises caused by the beating of the cable pulls. The flag hoist is described to be located either internally or externally the flag pole 400. In both embodiments the cable pulls are
covered and thus protected and not exposed to wind along the flag pole 400.

Figure 2a shows schematically a front view the device 100 according to the invention installed on a flag pole 400 with a flag 500 hoisted in the top of the flag pole 400. The device being in a closed position. The device 100 is installed for distancing flag ropes 300 from a flag pole 400. The device 100 is shown installed just above a cleat 200 with which the flag rope 300 is tied in. The device 100 is not restricted to be installed at that position, it can be installed at any position along the flag pole 400, but it should preferably be installed within a reachable distance for the person hoisting the flag, such that the person is able to install/thread the flag rope 300 onto the device 100 in order to secure a distance between the flag rope 300 and the flag pole 400.

Figure 2b shows schematically and in perspective a close up of the device 100 installed on the flag pole 400. The device 100 is shown to embrace the flag pole 400 at least half way around the flag pole 400. The elastic strap 180 for further supporting the device 100 is shown installed, threaded from a recess 160a in the first element 110a of the device 100 to a recess 160b in the second element 110b of the device 100. The elastic strap 180 is, together with the device 100 fully embracing the flag pole 400, around the circumference of the flag pole 400.

Figure 3a shows schematically and in perspective a tilted view of the device 100 installed on the flag pole 400. Figure 3b shows schematically and in perspective a view tilted slightly from a top view of the device 100 installed onto the flag pole 400.

Figure 4a shows schematically and in perspective the device 100 according to the invention. The device 100 comprises a first and second element 110a, 110b rotatably connected with an adjustable hinge connection 140, each element 110a, 110b comprises a first and second flag rope bar or strut 120a, 120b and a first and second curved element 130a, 130b. The adjustable hinge connection 140 being a protrusion in one of the flag rope bar or strut 120a, 120b and a hole for receiving the protrusion in the other of the flag rope bar or strut 120a, 120b, the two elements 110a, 110b being kept together by means of a snap connection in the hinge connection 120, wherein the two elements 110a, 110b of the device 100 is clicked together by the snap connection. The adjustable hinge connection 140 may also be a bolt (not shown) positioned through holes located in the free end of each curved element 130a, 130b, wherein the holes are in an aligned position to each other and the two elements 110a, 110b is kept together by means of nuts at each end of the bolt. The end 150a, 150b of each flag rope bar or strut 120a, 120b being the end opposite the hinge joint end of each element 110a, 110b, is formed in order to be able to receive and keep the flag rope in a position in the device 100, the ends 150a, 150b preferably being an open recess with a V-shape (shown), a shape of a half circle (not shown), half oval (not shown), half square (not shown) or any other suitable shape. The adjustable hinge connection 140 is adjustable over a variety of angles, each angle giving a position. Said connection 140 holds each given position until it is forced to another angle. The recesses 160a, 160b in the first and second elements 110a, 100b of the device 100 are arranged in the rounded transition between the curved elements 130a, 130b and the flag rope bar or strut 120a, 120b. Here shown two recesses 160a, 160b in each transition, but it is not limited to only two recesses, it may be only one or it may be three or four recesses.

Figure 4b shows schematically and in perspective the device 100 according to the invention seen from below. The device 100 is shown to be hollow from below showing ribs in order to reinforce the construction of the device 100 to withstand the forces exposed to the device 100. The device 100 is preferably made of a polymer material or a fibre composite material, more preferably the device 100 is made of a recyclable polymer or fibre composite material. The device 100 may also be made of a metal material, e.g. aluminium, iron, etc.

When the device 100 is installed at the flag pole 400 the first and second flag rope bar or strut 120a, 120b are preferably extending in horizontal direction, perpendicular to the flag pole 400.

Figure 5 shows schematically and in perspective the device 100 prior to being connected to the flag pole 400. The device 100 holding an open position.

Figure 6 shows schematically and in perspective the device 100 according to the invention installed on the flag pole 400, a device 100 located on right side of the pole 400 is shown to illustrate the distance from the cleat 200 to the installed device 100. The device 100 is installed a distance above the cleat 200, preferably at a location at the flag pole 400 measured from the centre or midpoint of the cleat 200 to a length corresponding to the length of the device 100 and an additional length of 3-10 cm, preferably 5 cm. The length of the device is measured from one end 150a, 150b of the device to the opposite end 150a, 150b of the device.

Figure 7 shows schematically and in perspective the device according to the invention, the end 150a, 150b of each flag rope bar or strut 120a, 120b formed in order to be able to receive and keep the flag rope 300 in a position in the device 100, the ends 150a, 150b being an open recess having a V-shape. The V-shape secures the rope 300 and reduces vibrations of the rope 300, as the rope is being wedged in the V-shape. In order to further reduce vibrations and resonances between the device 100 and the flag pole 400, rubber pads (not shown), e.g. such used on furniture, may be placed between the flag pole 400 and the device, preferably in circular indents 170a (not shown), 170b located on opposite sides of the curved elements 130a, 130b on the device 100. The circular indents 170a, 170b are arranged in the rounded transition between the curved elements 130a, 130b and the flag rope bar or strut 120a, 120b, above the recesses 160a, 160b.

Table 1

Component	Description
100	Device for distancing flag ropes from a flag pole
110a	First device element
110b	Second device element
120a	First flag rope bar or strut
120b	Second flag rope bar or strut
130a	First curved element
130b	Second curved element
140	Adjustable hinge connection for connecting first and second flag rope bar or strut
150a	First end for receiving a flag rope
150b	Second end for receiving a flag rope
160a	First recess(es)
160b	Second recess(es)
170	Circular indent
180	Elastic strap
200	Cleat
300	Flag rope/line
400	Flag pole
500	Flag / pennant

The following clauses set out features of the invention which may not be presently claimed but which may form the basis for amendments or future divisional applications.

CLAUSES

1. A device (100) for distancing a flag rope (300) from a flag pole (400) in order to reduce unwanted noise, said device (100) comprises:
   - one or more device elements (110a, 110b) for receiving the flag rope (300); and -
   - a rotatably adjustable hinge connection (140).

2. The device (100) according to clause 1, wherein said one or more device elements (110a, 110b) comprises a flag rope bar or strut (120a, 120b) and a curved element 130a, 130b), wherein the flag rope bar or strut (120a, 120b) is fixedly connected to one of the end portions of the curved element (130a, 130b).

3. The device (100) according to clause 1 or 2, wherein the flag rope bar or strut (120a, 120b) is arranged perpendicular to the flag pole (400) when the device (100) is installed.

4. The device (100) according to any preceding clause, wherein said device comprises two device elements (110a, 110b).

5. The device (100) according to any preceding clauses, wherein the two device elements (110a, 110b) is forming two mirrored device elements (110a, 110b).

6. The device (100) according to any preceding clause, wherein the flag rope bar or strut (120a, 120b) comprises an end (150a, 150b) having an open recess for receiving a flag rope, said end (150a, 150b) located on the opposite end of where the curved element (130a, 130b) is connected to the flag rope bar or strut (120a, 120b).

7. The device (100) according to clause 6, wherein the open recesses of the ends (150a, 150b) are having a V-shape, a shape of a half circle, half oval, half square or any other suitable shapes for receiving a flag rope (300).

8. The device (100) according to any preceding clause, wherein the adjustable connection (140) is adjustable to a flag pole (400) having a diameter ranging from 60 mm to 200 mm.

9. The device (100) according to one of the clauses 1-4, wherein the adjustable connection (140) is adjustable to a flag pole (400) having a diameter ranging from 70 mm to 190 mm.

10. The device (100) according to one of the clauses 1-4, wherein the adjustable connection (140) is adjustable to a flag pole (400) having a diameter ranging from 80 mm to 180 mm.

11. The device according to any preceding clause, wherein the device (100) comprises at least one first and second recess (160a, 160b) arranged in rounded 15 transitions between the curved elements (130a, 130b) and the flag rope bar or strut (120a, 120b).

12. The device (100) according to any preceding clause, wherein the device (100) comprises circular indents (170a, 170b) arranged in the rounded transitions between the curved elements (130a, 130b) and the flag rope bar or strut (120a, 120b).

13. The device (100) according any preceding clause, wherein the device (100) comprises an elastic strap (180) connected in one end to a first recess (160a) of the first element (110a) of the device (100) and in an opposite end to the second recess (160b) of the second element (110b) of the device (100).

14. A method for installing a device (100) of one of the clauses 1-12 to a flag pole (400), wherein the method comprises the steps of:
embracing the flag pole (400) with the device (100) in the open position; 30 - closing the device (100) into a closed position;
tying the flag rope (300) to a cleat (200);
threading the flag rope (300) onto the ends of the flag rope struts/bars (120a, 120b) of the device (100).

15. The method according to clause 14, wherein an elastic strap (180) is threaded between a first recess (160a) of the first element (110a) of the device (100) to a second recess (160b) of the second element (110b) of the device (100) such that the device (100) and the elastic strap (180) forms a closed loop around the flag pole (400).

C l a i m s

1. A device (100) for distancing a flag rope (300) from a flag pole (400) in order to reduce unwanted noise, said device (100) comprises:
   - two device elements (110a, 110b) for connecting to the flag pole (400) and receiving the flag rope (300) at a distance from the flag pole (400); and
   - a rotatably adjustable hinge connection (140) provided between the two device elements (110a, 110b), c h a r a c t e r i s e d i n that the device (100) comprises an elastic strap (180) for connection in one end to a first recess (160a) of the first element (110a) of the device (100) and in an opposite end to a second recess (160b) of the second element (110b) of the device (100) so that the device and the elastic strap may form closed loop around the flag pole (400).

2. The device (100) according to claim 1, wherein said two device elements (110a, 110b) comprise a flag rope bar or strut (120a, 120b) and a curved element (130a, 130b), wherein the flag rope bar or strut (120a, 120b) is fixedly connected to one of the end portions of the curved element (130a, 130b).

3. The device (100) according to claim 1 or 2, wherein the flag rope bar or strut (120a, 120b) is arranged perpendicularly to the flag pole (400) when the device (100) is installed.

4. The device (100) according to any one of the preceding claims, wherein the two device elements (110a, 110b) is forming two mirrored device elements (110a, 110b).

5. The device (100) according to any one of the preceding claims, wherein the flag rope bar or strut (120a, 120b) comprises an end (150a, 150b) having an open recess for receiving a flag rope, said end (150a, 150b) located on the opposite end of where the curved element (130a, 130b) is connected to the flag rope bar or strut (120a, 120b).

6. The device (100) according to claim 5, wherein the open recesses of the ends (150a, 150b) are having a V-shape, a shape of a half circle, half oval, half square or any other suitable shapes for receiving a flag rope (300).

7. The device (100) according to any preceding claim, wherein the adjustable connection (140) is adjustable to a flag pole (400) having a diameter ranging from 60 mm to 200 mm.

8. The device (100) according to any one of the preceding claims, wherein the adjustable connection (140) is adjustable to a flag pole (400) having a diameter ranging from 70 mm to 190 mm.

9. The device (100) according to any one of the preceding claims, wherein the adjustable connection (140) is adjustable to a flag pole (400) having a diameter ranging from 80 mm to 180 mm.

10. The device according to any one of the claims 2-9, wherein at least one of the first and second recess (160a, 160b) are arranged in rounded transitions between the curved elements (130a, 130b) and the flag rope bar or strut (120a, 120b).

11. The device (100) according to claim 10, wherein the device (100) comprises circular indents (170a, 170b) arranged in the rounded transitions between the curved elements (130a, 130b) and the flag rope bar or strut (120a, 120b).

12. A method for installing a device (100) of one of the claims 1-11 to a flag pole (400), wherein the method comprises the steps of:
- embracing the flag pole (400) with the device (100) in the open position;
- closing the device (100) into a closed position;
- tying the flag rope (300) to a cleat (200);
- threading the flag rope (300) onto the ends of flag rope struts/bars (120a, 120b) of the device (100), characterised in that the method further comprises the step of:
- threading an elastic strap (180) between a first recess (160a) of the first element (110a) of the device (100) and a second recess (160b) of the second element (110b) of the device (100) such that the device (100) and the elastic strap (180) forms a closed loop around the flag pole (400).

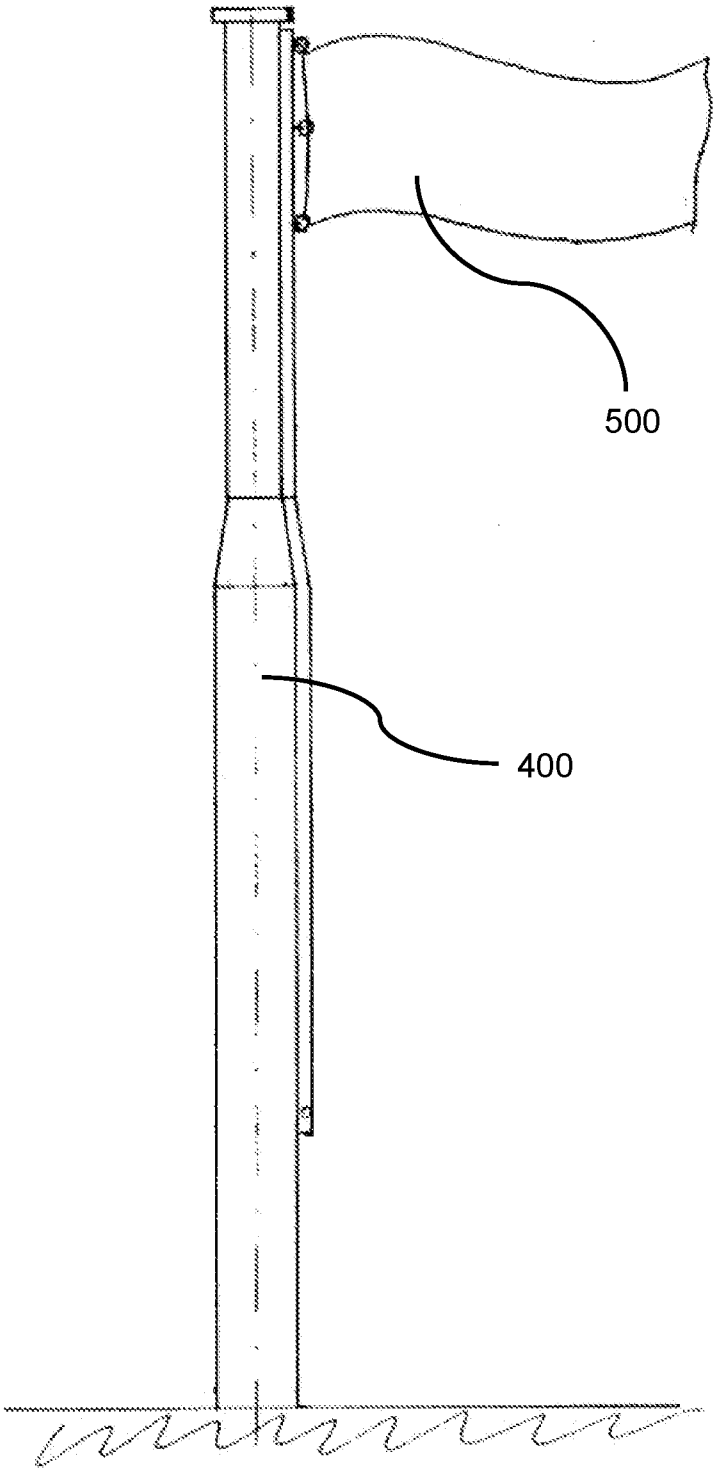

Fig. 1

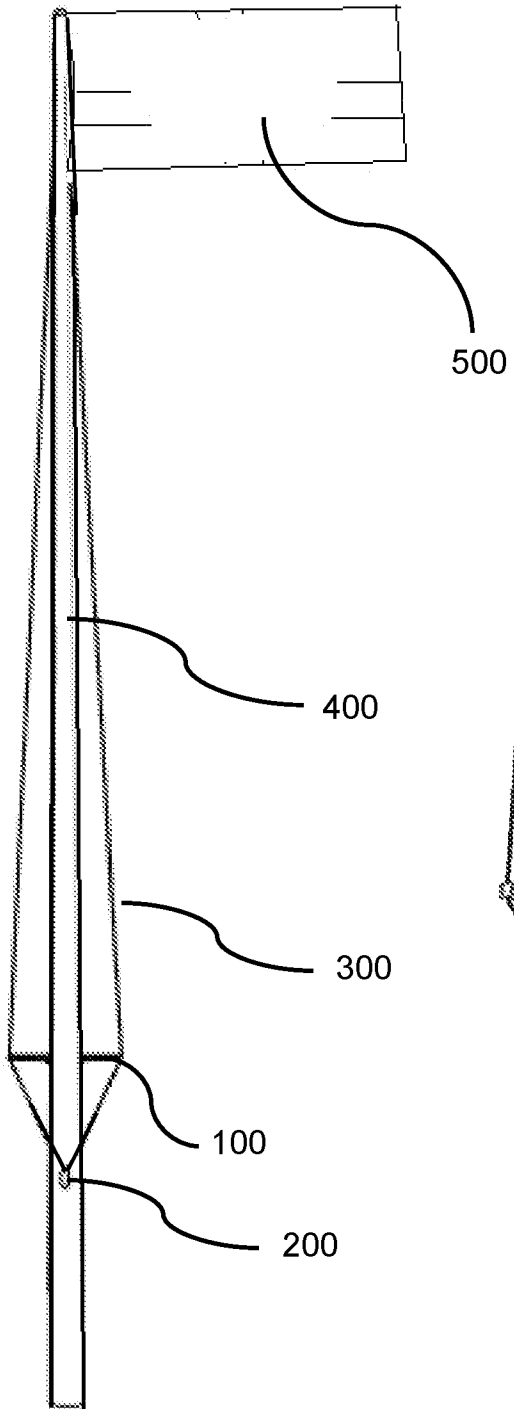

Fig. 2a

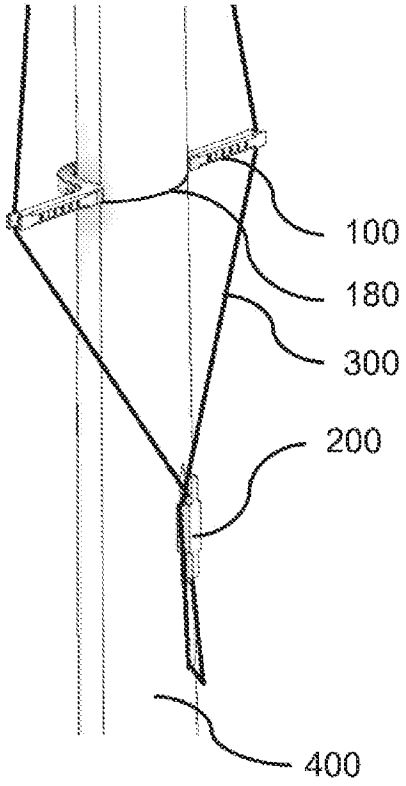

Fig. 2b

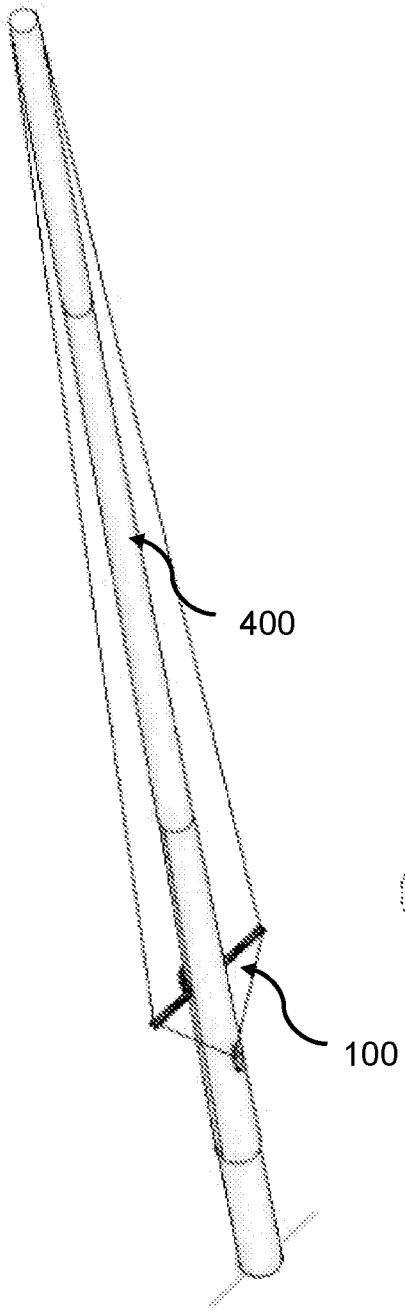

Fig. 3a

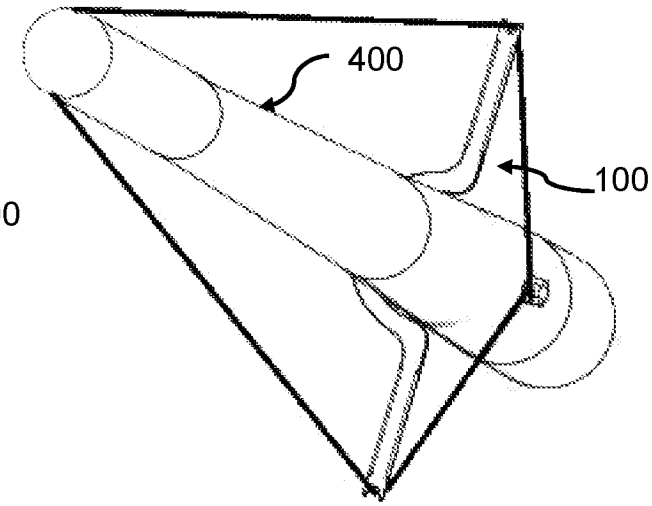

Fig. 3b

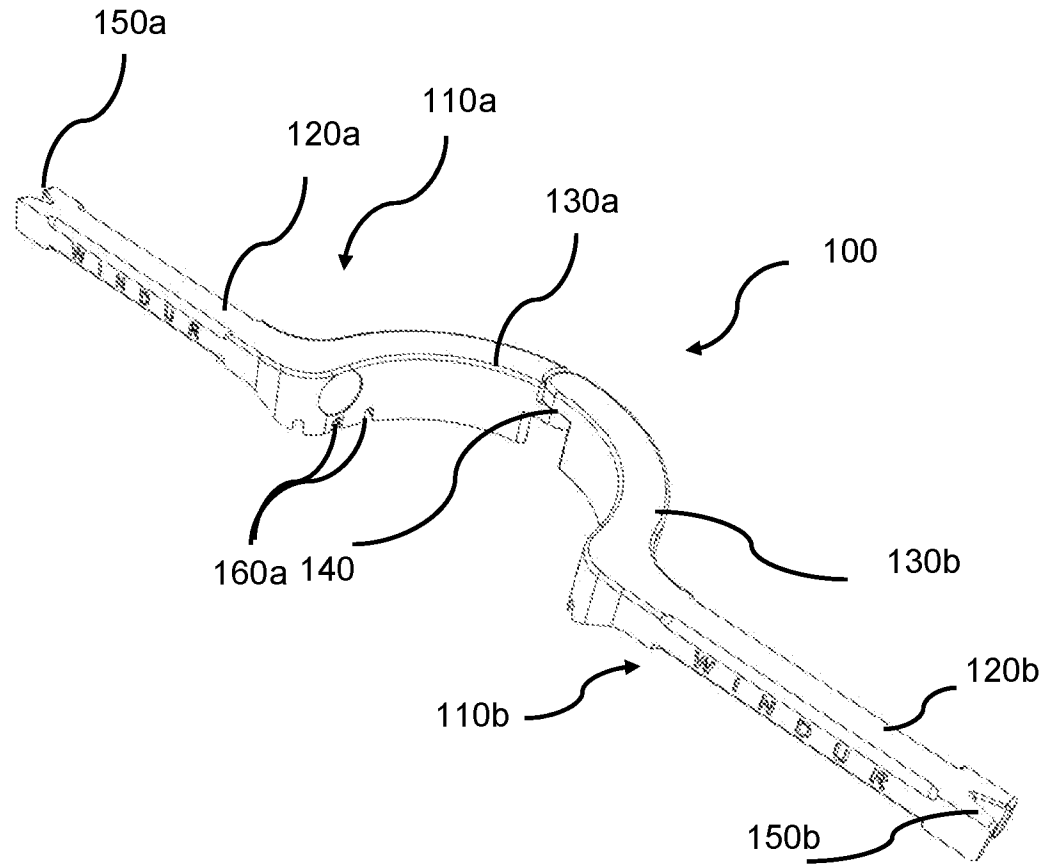
150a
120a
110a
130a
100
160a
140
130b
120b
110b
150b

Fig. 4a

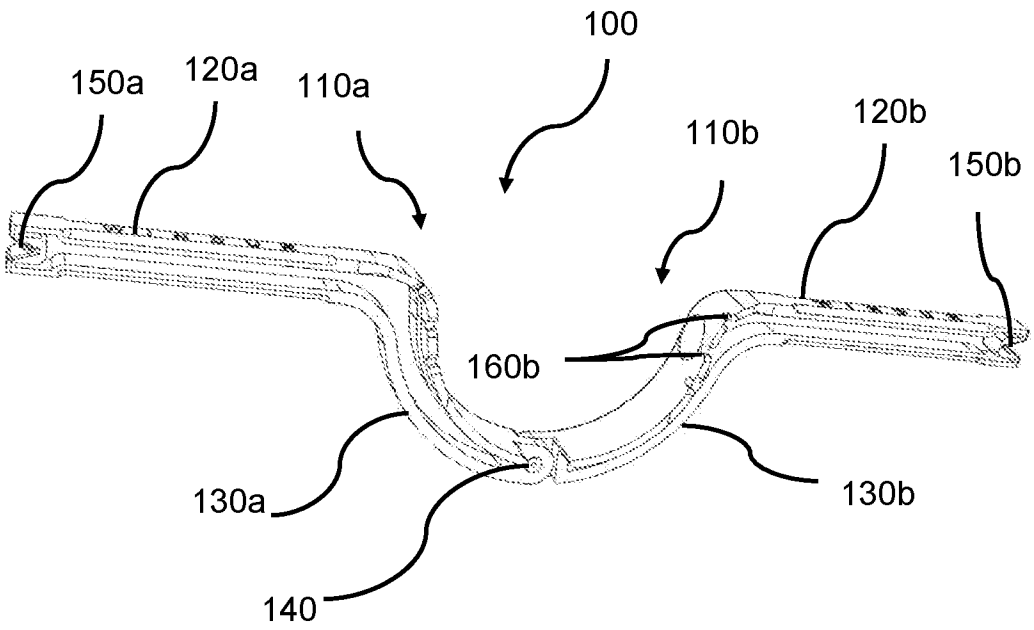
100
150a
120a
110a
110b
120b
150b
160b
130a
130b
140

Fig. 4b

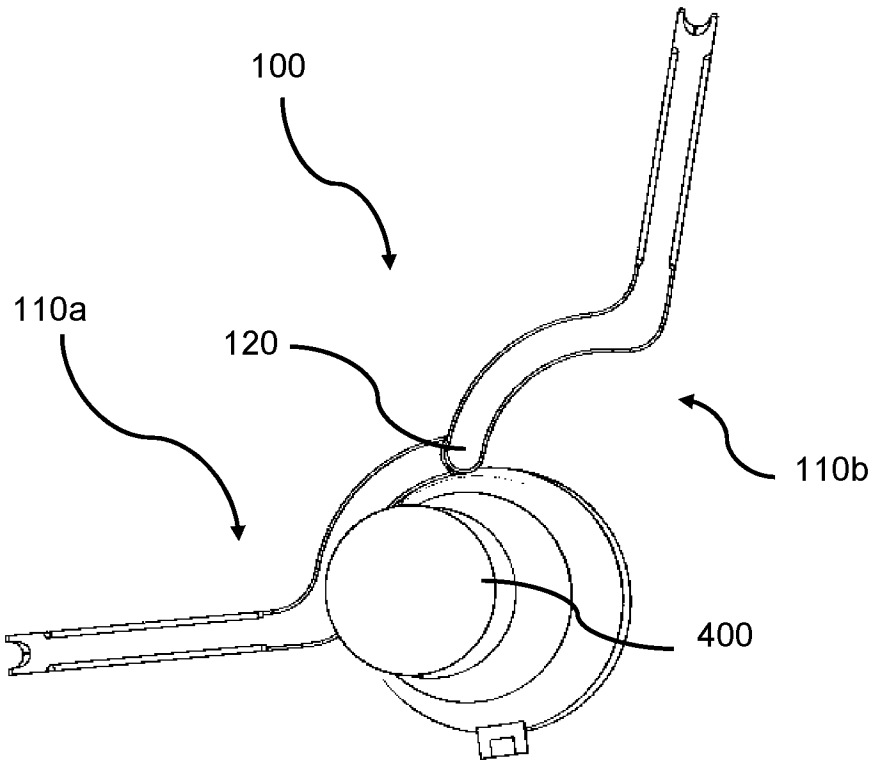

Fig. 5

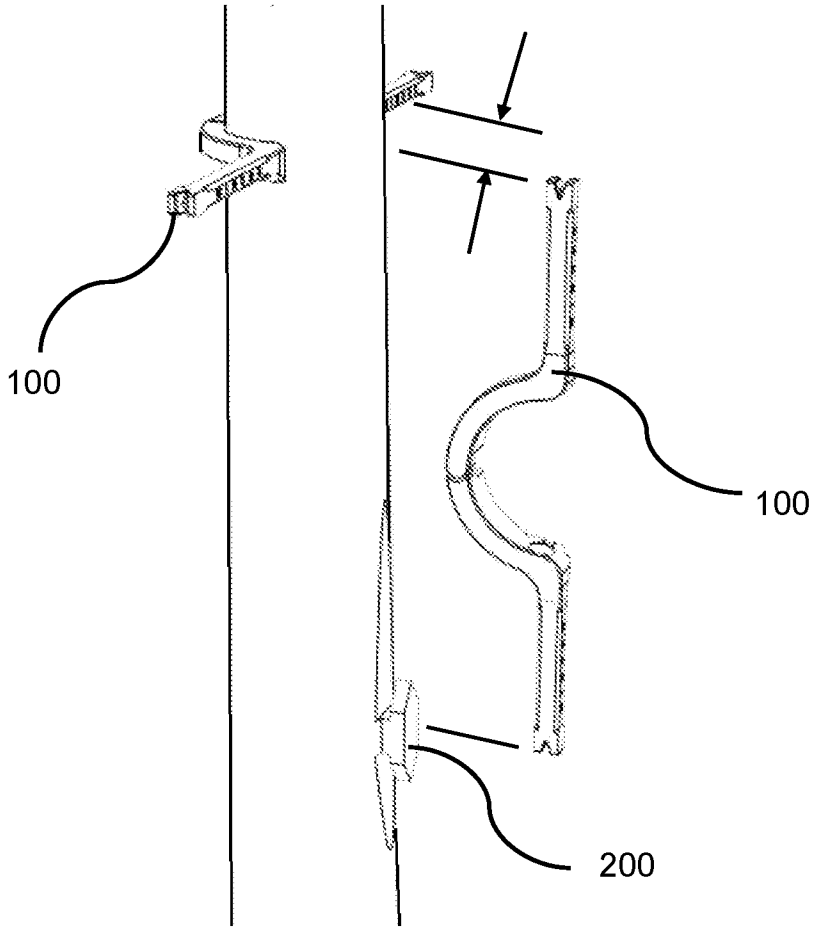

Fig. 6

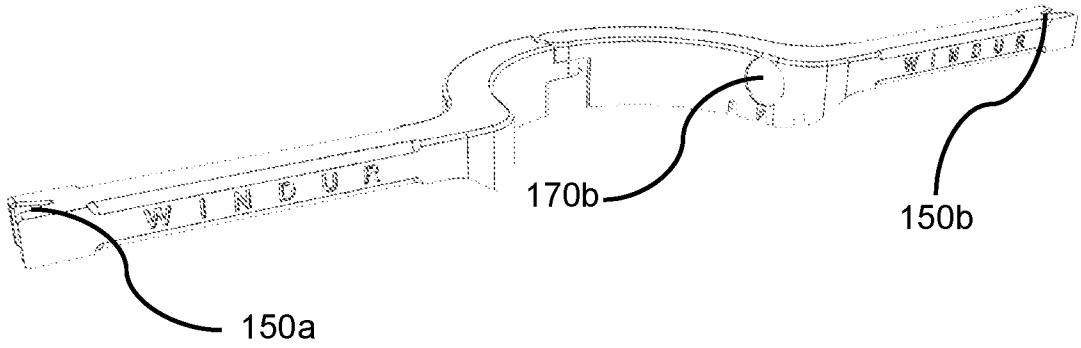

Fig. 7

INTERNATIONAL SEARCH REPORT

International application No
PCT/NO2023/050148

A. CLASSIFICATION OF SUBJECT MATTER
INV. G09F17/00
ADD. G09F7/18

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)
G09F

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 738 031 A (MALINA GEORGE [CA]) 14 April 1998 (1998-04-14) column 5, line 8 - column 6, line 63 figures 1-4	1-12
X	US 1 760 337 A (ALPHONSE BERNARDIN) 27 May 1930 (1930-05-27)	1-4,7-9, 12
A	the whole document	5,6,10, 11
A	WO 2007/089190 A1 (NYREN CURT JOHAN [SE]; SCHOLLIN NICLASS HENRIK [SE]) 9 August 2007 (2007-08-09) page 13, line 20 - page 16, line 24 figures 1-9	1-12
A	JP H06 10987 U (A) 10 February 1994 (1994-02-10) abstract; figures 1-4	1-12

☐ Further documents are listed in the continuation of Box C.

☒ 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
11 October 2023	19/10/2023

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	Zanna, Argini

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/NO2023/050148

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5738031 A	14-04-1998	CZ 7660 U1	23-07-1998
		US 5738031 A	14-04-1998
US 1760337 A	27-05-1930	NONE	
WO 2007089190 A1	09-08-2007	SE 529225 C2	05-06-2007
		WO 2007089190 A1	09-08-2007
JP H0610987 U	10-02-1994	NONE	