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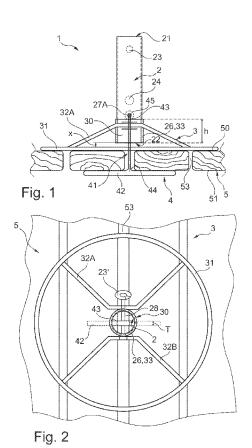
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(54) Title: PARASOL BASE ASSEMBLY



(57) Abstract: The present invention relates to a parasol base assembly comprising a tubular body with a first opening for receiving a parasol pole and a second opening in opposite end, means for fasten tight a pole received in the first opening, a base part comprising a socket, placed in the center of said base part, being arranged to interconnect with said tubular body wherein a fastening device is protruding from the second opening.

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PARASOL BASE ASSEMBLY

FIELD OF THE INVENTION

The present invention relates to a parasol base assembly comprising a tubular body with a first opening for receiving a parasol pole, means arranged to tightly fasten a pole received in the first opening a base part comprising a socket, in the center of said base part, being arranged to interconnect with said tubular body.

10 BACKGROUND ART

Parasols and garden umbrellas are widely used as sun and other weather protection, frequently used at terraces, sun decks and other outdoor places. Ordinary parasol bases as concrete ballast elements or plastic holders filled with water or sand are ordinarily employed. These ordinary parasol bases have several drawbacks. A concrete ballast element is very clumsy and heavy to move since it often has a weight of 40-50 kg, causing effort to move the ballast element and possibly damages. The plastic holders are lighter but still clumsy. To fill the holder with sand or water is time-consuming and often leads to spillage. Removal of a plastic holder filled with e.g. water is also heavy. Additionally, a water filled plastic holder needs to be constructed to prevent damage if the water retained within the plastic holder freezes and expands. Further, storage of these ordinary parasol bases require large available storage-room. Another drawback, especially with the plastic holders, is that in an heavy uplift by the wind the whole parasol with the parasol base can be thrown over.

EP 0818594 discloses a combination of the two ordinary parasol bases mentioned earlier. A concrete ballast part and a holder that can be filled with water or sand still gives the basically same problem as told above.

None of the known parasol bases provides a solution to the above mentioned problems, therefore it is obvious that there is a need to find a better solution.

SUMMARY OF THE INVENTION

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It is an object of the present invention to overcome or at least minimize the drawbacks and disadvantages of the above described problems. This is achieved by a parasol base in accordance with claim 1.

Thanks to this invention many of the above mentioned problems can be solved. The parasol base assembly with a fastening device according to the invention, protruding from the underside of the parasol base, facilitates easy and secure anchoring, e.g. on a terrace or a sun deck. With just a few mounting steps it is quickly anchored or removed.

- Thanks to the new anchoring principle it will stand securely also in strong wind, i.e. sudden wind blows will no longer be a problem. Moreover the design principle allows to make the parasol base relatively light weight and slim, and also facilitates cost efficient production.
- According to a further aspect according to the invention the parasol base assembly comprises a few parts that can be easily assembled and easily disassembled at storage. This gives the need of just a small storage-room.
- According to still another aspect of the invention, the base part comprises a frame which makes it light, low cost and not so bulky as a plastic holder or a homogeneous concrete base. Hence it will be easy to lift and move the parasol base assembly.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be described in more detail with reference to the appended figures, in which:

- Fig. 1 shows a side view of a parasol base assembly according to the invention,
- Fig. 2 shows a parasol base assembly according to the invention, from above,
- Fig. 3 shows an alternative fastening device according to the invention, and
- Fig. 4 shows a perspective view of a parasol base assembly with the alternative
- 25 fastening device according to the invention.

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DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The following detailed description and the examples contained therein, are provided for the purpose of describing and illustrating certain embodiments of the invention only and are not intended to limit the scope of the invention in any way.

- Fig. 1 shows a parasol base assembly 1 comprising a tubular body 2 with a first opening 21 for receiving a parasol pole (not shown), a second opening 22 in the opposite end and means 23, 24, 23', 24' for fasten tight a pole received in the first opening 21.
- Further according to the invention the parasol base assembly 1 comprises a base part 3, comprising a ring shaped base support 31 and a centrally positioned tubular socket 30.

 The base support 31 and the tubular socket 30 are interconnected by two supports 32 A,

32 B, each presenting a kind of U-shape. The two supports 32 A, 32 B run from the base support 31 up and towards the socket 30 that are placed in the center of said base part 3. The base support 31 is in the form of a rod that is bent into a circle, e.g. a diameter of 250-500 mm; which is in close contact with an upper side 50 of a ground support, e.g. a layer composed of floorboards 5. Between the floorboards 5 there are interspaces 53. In the lower portion, the tubular body 2 has a transverse through hole i.e. two bores 27 A, 27 B facing each other. There is a gap, with a height X, between the second opening 22 and the base support 31. Thanks to this gap X the parasol base assembly 1 can stand steadily even if the ground support is uneven, i.e. protruding at the centre.

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The tubular body 2 is releasably interconnected to the base part 3. The lower part of the tubular body 2 comprises outer threads 26 while the tubular socket 30 comprises inner threads 33. Preferably the whole height h of the socket 30 is arranged with inner threads, e.g. by means of cutting up a pre threaded longer (standard) pipe into appropriate pieces. The height h of the socket 30 is indicative of how much the tubular body 2 may be adjusted in relation to the base part 3, i.e. corresponding to the distance of adjustability between a crosspiece 42 of a fastening device 4 and the base support 31. The outer threads 26 may preferably be arranged by welding a separate, relatively small piece (e.g. presenting a length of about 0,1- 0,5 h) of a (standard) pre threaded pipe having outer threads matching the inner threads of the socket 30.

The fastening device 4 has a portion protruding into the second opening 22 of said tubular body 2. The fastening device 4 comprises a rod 41 with the crosspiece 42 at a first end 44 of the rod 41. The second end 43 of the rod 41 is positioned inside the tubular body 2, by means of a transversal through hole 45 connecting it to the tubular body 2 by means of a screw 28. The rod 41 protrudes through the inter space 53 between two floorboards 5. The crosspiece 42 extends perpendicularly to the interspaces 53 between the floorboards 5 and is in close contact with an underside 51 of said floorboards 5.

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The fastening device 4 has in a preferred embodiment the shape of a T-IRON. The length of the rod 41 is preferably in the interval 5-25 cm, more preferred 12-17 cm. The crosspiece's 42 length is in the interval 10-30 cm, preferably 18-24 cm. Both the rod 41 and the crosspiece 42 has a thickness T in the range of 2-12 mm more preferably 4-6 mm.

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Fig. 2 shows the parasol base assembly 1 seen from above, clearly showing that the base support 31 is made from a metal wire forming a circle. At approximately every 90 degrees on said base support 31 the ends of said supports 32 A, 32 B are fixed e.g. by welding positioning the socket 30 in the centre of the base support 3. As seen from above inside the tubular body 2 is connected to the socket 3 by means of the screw 28 that extends through the bores 27 A, 27 B, and through the rod's hole 45. Pole fastening means 23', 24' in form of a fixing screws protrude at the outer side of the tubular body 2. The base part 3 has a diameter in the interval 20-60 cm preferably in the interval 35-45 cm. The wire that forms the base support 31 and the supports 32 A, 32 B has a circular cross section with an appropriate diameter depending on the purpose, preferably in the range 0,5-2 cm.

When utilizing the parasol base assembly 1, the tubular body 2 is joined with the base part 3 by means of the threaded parts 26, 33, by screwing the tubular body 2 a rather long distance into the socket 30. Thereafter the second end 43 of said rod 41 is introduced through the second opening 22 of the tubular body 2 up to the level of the two bores 27 A, 27 B. Then the screw 28 is inserted it through one of the bores 27 A, 27 B, further through the rod's hole 45 and finally out through the second bore 27 A, 27 B, and preferably fixed by a nut (not shown). Thereafter the crosspiece 42 of the fastening device 4 may be inserted in a gap 53 between two floorboards 5, moved below them and then turned 90 degrees, by rotating the whole assembly 1. To safely hold the crosspiece 42 transversally in relation to the gap 53, the assembly 1 is lifted upwards to gently press against the underside 51 of the floorboards 5, i.e. maintaining it perpendicularly to the interspaces 53. Now, by screwing down the base part 3 (e.g. by moving the support legs by use of a foot) against the floorboards 5, the base support 31 will contact the upper side 50 of the floor boards, thereby exerting a clamping force onto the floorboards 5 in between the base support 31 and the crosspiece 42. The tubular body 2 is now ready to receive a pole e.g. a parasol pole, inserted in the first opening 21 until the pole rests against the second end 43 of the rod 41. The pole is then fixed by fixing screws 23', 24' in the holes 23, 24.

Fig. 3 shows an alternative fastening device 4' according to the invention. The alternative fastening device 4' comprises a metal wire bent at one end as a loop 47 arranged to join together with the two bores 27 A, 27 B and the screw 28. The metal wire is bent to a loop 47 in one end and continues as a straight rod 48 of about one third of the whole fastening device's 4' length L. The remaining approximately two thirds of the metal wire is formed as a spiral 49, i.e. a kind of cross piece, fulfilling basically the

same function as the cross piece 42 of the first fastening device 4. The spiral 49 ends with a sharp tip 40. The whole fastening device 4' has a length L in the interval 15-55 cm, more preferably 30-40 cm. The fastening device 4' has a circular cross section with a diameter D in the interval 2-14 mm, more preferably 6-10 mm.

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Fig. 4 shows a perspective view of the parasol base assembly 1 with the alternative fastening device 4'. When utilizing the parasol base assembly 1 with this alternative fastening device 4' the tubular body 2 is joined with the base part 3 as described above. Thereafter the loop 47 is introduced through the second opening 22 of the tubular body 2 up to the level of the two bores 27 A, 27 B. Then the screw 28 is inserted through one of the bores 27 A, 27 B, further through the loop 47 and finally out through the second bore 27 A, 27 B, and preferably fixed by a nut (not shown). This alternative fastening device 4' is preferably used when the ground support is softer e.g. on a lawn. The assembly 1 is held e.g. in the tubular body 2 and the sharp tip 40 is pressed against the lawn at the same time as the whole assembly 1 is rotated until the spiral 49 is screwed down in the lawn. Thereafter the base part 3 is screwed down against the lawn until the base support 31 will contact the lawn thereby exerting a clamping force between the spiral 49 and the base support 31. The tubular body 2 is now ready to receive a pole e.g. a parasol pole, inserted in the first opening 21 and then fixed by fixing screws 23', 24' in the holes 23,24.

The invention is not to be seen as limited by the embodiments described above but can be varied within the scope of the appended claims, as will be readily apparent to the person skilled in the art. For instance, the base support 31 may have other shapes than like a circle, e.g. square shaped. The wire that forms the base support 31 and the supports 32 A, 32 B may have other cross sections than circular and to reduce the weight even more, the base support 31 and the supports 32 A, 32 B may be made of a hollow pipe. The length and diameter of the tubular body 2 and the socket 30 can be varied depending on the purpose. The socket 30 preferably comprises a piece of pipe with prefabricated inner threads, cut off into suitable length. Likewise the tubular body 2 preferably comprises an end piece of pipe with prefabricated outer threads, which end piece may be welded to the lower end of the major portion of the tubular body 2, which accordingly may be cut into appropriate length from a standard pipe. Of course other connection solutions may be used that can achieve the tightening of the fastening devices 4,4' as is evident for the skilled person. The parasol base assembly 1 is made of a strong material e.g. steel, but the material may vary and still fulfill the same basic function. In a preferred embodiment the fastening device 4 is interconnected to the

tubular body 2 by a rod device 28, e.g. a screw fixed in the two bores 27 A, 27 B.

However may variations may be used to achieve that function, e.g. merely one bore and a nut attached on the opposing side, or a non threaded rod that is secured by means of a key-hole, etc. According to a modification the cross piece may be connected to a rope/flexible wire which may be fixed and tensioned by well known devices, e.g. used to tension/fix devices on boats. Moreover the anchoring means 45 of the fastening device 4 may be in varying forms, e.g. a hook which implies that it may be attached to the screw/pin 28 without removing the screw/pin 28.

CLAIMS

1. Parasol base assembly (1) comprising a tubular body (2) with a first opening (21) for receiving a parasol pole, means (23,24,23',24') arranged to tightly fasten a pole received in the first opening (21), a base part (3) comprising a socket (30), in the center of said base part (3), being arranged to interconnect with said tubular body (2), **characterized in that** a fastening device (4) is protruding from a second opening (22) of said tubular body (2), wherein said fastening device (4) comprises a cross piece (42) being arranged to secure the parasol base assembly (1).

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- 2. Parasol base assembly according to claim 1, **characterized in that** said fastening device (4) comprises a rod (41) with said crosspiece (42) at a first end (44), and an anchoring means (45) at a second end (43) of said rod (41), which anchoring means (45) is arranged to connect the fastening device (4) to said tubular body (2).
- 3. Parasol base assembly according to claim 2, **characterized in that** said anchoring means is in the form of a hole (45).
- 4. Parasol base assembly according to any of claims 1-3, **characterized in that** the tubular body (2) is arranged with attachment means (27 A, 27 B, 28) arranged to interact with said fastening device (4).
- 5. Parasol base assembly according to claim 4, **characterized in that** the attachment means (27 A, 27 B, 28) comprises at least one bore (27 A, 27 B) in said tubular body (2).
 - 6. Parasol base assembly according to claims 1-5, **characterized in that** at least one bore (27 A, 27 B), is arranged to interact with a shaft element (28), preferably in the form of a screw (28).
 - 7. Parasol base assembly according to any of claims 1-6, **characterized in that** the interconnection between the tubular body (2) and the base part (3) comprises a threaded connection (26, 33).

- 8. Parasol base assembly according to any of claims 1-7, **characterized in that** the base part (3) comprises an annular base support (31), connected to a centrally positioned socket (30) by means of rod formed supports (32 A, 32 B).
- 9. Parasol base assembly according to claim 8, **characterized in that** the base support (31) and the socket (30) are interconnected by the two u-shaped supports (32 A, 32 B).
- 10. Parasol base assembly according to claim 1, **characterized in that** said cross piece (42) is in the form of a spiral (49).

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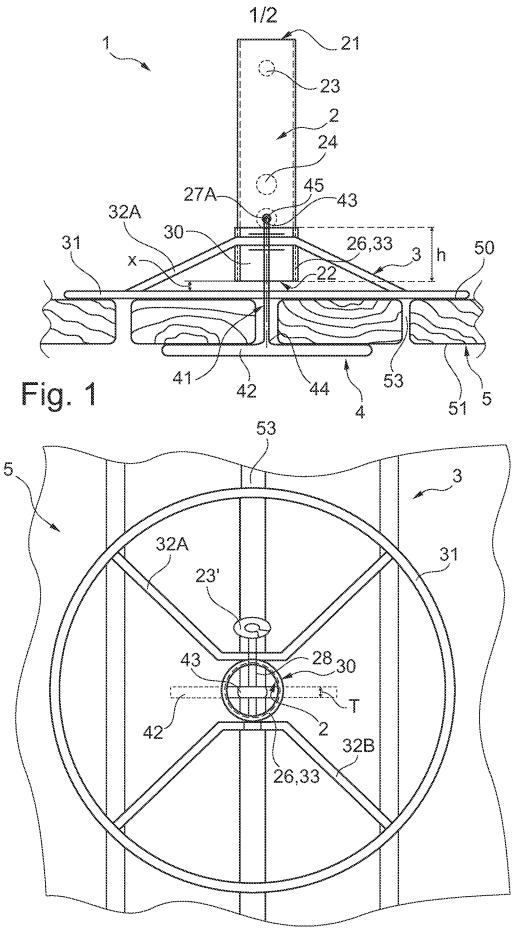
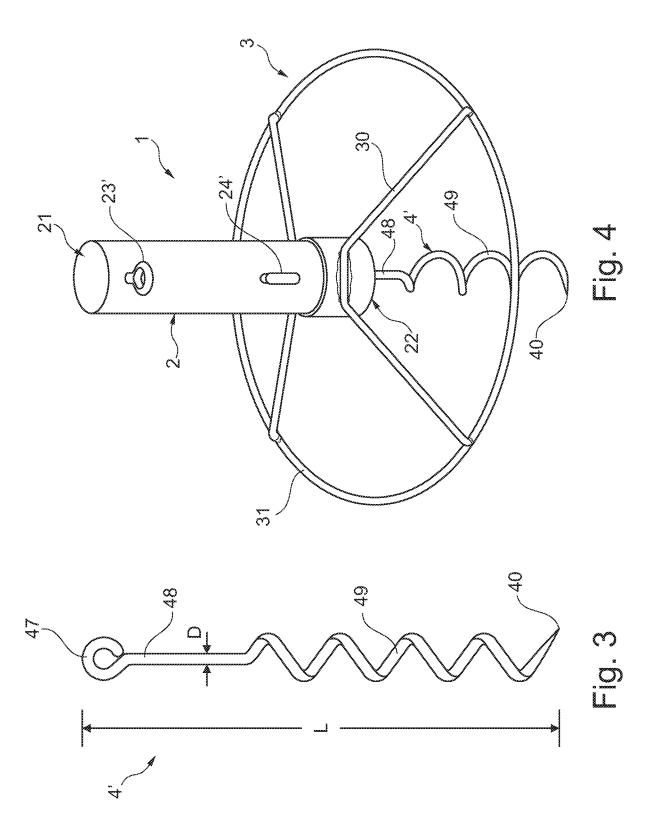


Fig. 2



INTERNATIONAL SEARCH REPORT

International application No. PCT/SE2011/050254

A. CLA	SSIFICATION OF SUBJECT MATTER					
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	o International Patent Classification (IPC) or to both n	ational classification and IPC				
	DS SEARCHED					
1	cumentation searched (classification system followed by	classification symbols)				
	5B, A47B, A47G, E04H					
1	on searched other than minimum documentation to the ex	stent that such documents are included in the	fields searched			
SE, DK,	FI, NO classes as above					
Electronic da	ta base consulted during the international search (name of	f data base and, where practicable, search ter	rms used)			
EPO-Inte	ernal, PAJ, WPI data					
C. DOCU	MENTS CONSIDERED TO BE RELEVANT		**************************************			
Category*	Relevant to claim No.					
Α	FR 2754438 A1 (POWER TREVOR (1998-04-17); whole document; figure		1-10			
А	US 5685517 A (SALIBRA JOSEPH), 11 November 1997 (1997-11-11); whole document		1-10			
A	US 7156357 B1 (KOCUR WILLIAM 01-02); whole document; figures 1,4 		1-10			
Further documents are listed in the continuation of Box C. See patent family annex.						
filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "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				
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INTERNATIONAL SEARCH REPORT

International application No. PCT/SE2011/050254

Continuation of: second sheet International Patent Classification (IPC) E04H 12/22 (2006.01) A47B 37/04 (2006.01)

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No. PCT/SE2011/050254

		W71.		
ED	2754420 44	47/04/4000	NONE	
FR US	2754438 A1			
US	5685517 A			
.03	7156357 B1	02/01/2007	NONE	