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(54) **PORTABLE FOLDING AWNING**

(57) Portable folding awning, for use especially on the beach, in the countryside, on terraces or recreation areas, for leisure or relaxation, which is characterised in that it has two parallel, extendible frames. There are posts folded under the frames in the manner of telescopic

tubes, a tensioning ball-and-socket joint on the arm of the frame and rubber tensioning elements at the ends of the frames, which are secured to the posts. There are also a securing stud and two rectangular slots at 90° and 45° to the perpendicular at the ends of the frames.

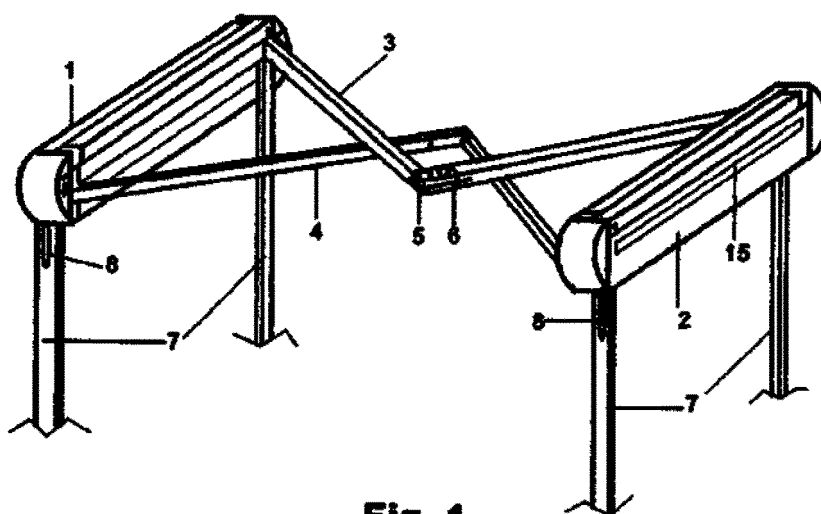


Fig. 1

Description

Subject matter of the invention

[0001] The present specification relates to a Utility Model concerning a portable folding awning, with a novel system for closing up and folding out, the clear purpose of which is to obtain a product with superb features, which enables proper securing and positioning of all its elements and is highly reliable during its useful life, in addition to the simplification of the set-up and subsequent maintenance in tasks of changing out each and every one of its elements.

Field of the invention

[0002] This invention is applicable within the industry of manufacturing awnings, sunshades and parasols for the beach, the countryside, terraces or gardens, street markets, and even for pavement cafés, where they are very typical, comprising the manufacture of accessories thereof.

Description of the invention

[0003] The portable folding awning proposed by the invention constitutes, in and of itself, a clear solution to the currently existing problem in the field, as it may be incorporated with a simple mechanism for set-up and opening thereof, thus improving upon the usefulness and appearance of the existing products on the market, within the sector at hand, providing shelter in its immediate surroundings, safety, and protecting all of its elements, both inside and out, without adversely affecting subsequent performance and achieving necessary safety conditions, likewise being subject to the corresponding regulations, all of which is based on a product with a simple system and a simplified operating concept.

[0004] Everyone is familiar with the current problem, stemming from the transport or placement of sunshades on the beach, in gardens or in the countryside or street markets, and likewise in cafés, which are usually the classic sunshades or, in some cases, simply four posts with a piece of cloth at the top between the four supports acting as an awning, with a great many small parts that eventually get lost, and which may be more or less rudimentary, and in many cases are an obstacle for passers-by or pedestrians. Thus, they entail great difficulties and drawbacks, particularly when it comes to safely securing them and keeping all of their elements sound against the wind or other elements, without at any time impeding good lighting and a pleasant and bright environment, apart from the excessive weight they usually have.

[0005] The location and positioning of the anchoring and securing points on beaches, in the countryside, or in other places where sunshades or parasols are usually located, are almost always on unstable ground such as the fine sand of beaches, where in many cases sun-

shades cannot withstand the gusts of wind and therefore may become an unpleasant nuisance for those using them and those in the surrounding area.

[0006] All of the problems mentioned are resolved in a satisfactory manner by the recommended system, which consists of a rectangular-shaped awning or sunshade, to which four telescopic posts are incorporated, which are made tense from the top portion using pieces of rubber in order to secure them to the ground. They are joined together at the top by two rigid and two collapsible and folding members, located at different heights so as to be able to cross over each other like scissors with the help of a central ball-and-socket joint found in the two facing folding arms. Once they are unfolded, their outline forms a rectangle upon which a tarpaulin is situated, secured on the rigid sides by means of Velcro. On the ends having the rigid sides, folding in parallel, two for each pair of posts, there are an equal number of arms that may be regulated by the ball-and-socket joint joining to the rigid side with two or three positions, and between each one of the parallel arms may be extended, as with the top portion, a tarpaulin with the same closing system. In this way two of the four sides of the awning or sunshade may be covered or closed up to a greater or lesser extent.

[0007] Lastly, when closing up the awning or sunshade, the folding system is very simple, as one need only fold the collapsible sides and hide them out of sight between the frames of the rigid upper sides when joining the two together. Subsequently, the telescopic posts are closed up, to fold them to the bottom of each of the frames of the rigid upper sides and, in the case of the arms, they are folded on top of each of the frames of the rigid upper sides over their top portion, thus reducing the entire system to a small-sized rectangular-shaped block wrapped in the tarpaulins, since during folding and by means of a cord situated in the centre of the central tarpaulin, they are left out of the folding of the awning, enabling the tarpaulin to be folded over the top of the assembly.

[0008] Because the indicated system has standard measurements like the conventional sunshades with which everyone is familiar, this makes it possible to adapt and fit them to all sorts of places when positioning them. The same is true even in terms of transport, as it is reduced, inside its bag, to a short longitudinal rectangular shape, providing unique features and an improved appearance, not just of the elements at the individual level, but also for the surroundings in which they are located.

[0009] The advantages and effects deriving from the Model being claimed are as follows:

- Due to its ability to be mass produced, and with commonly used, inexpensive and recyclable materials, the cost of the product is low.
- The assembly may be easily set up and taken down by means of manipulating the opening of the sunshade by extending the elements of which it is made up.
- As all of the elements are collapsible except for the

two rigid ones, this makes it so that, once folded up, it forms a rectangular-shaped package that is light-weight and easy to carry and store.

- As the arms are hinged, they make it possible to provide more or less shelter and to protect the inside from the sunlight and from heat, enabling air to pass through.
- As the assembly is light and all of its elements are joined together, one can rest assured that none of the elements or components will be lost.
- As another tarpaulin may be joined with securing arms to the fixed frames, the shaded area may thus be expanded.

Brief description of the drawings

[0010] To complement the present description, and for the purpose of helping to make the characteristics of the invention more readily understandable, the present specification is accompanied by several sheets of drawings, constituting an integral part of the same, which by way of illustration and not limitation represent the following:

Figure number 1.- Shows a perspective view of the awning or sunshade when partially open, wherein one may observe the main elements and their location upon the frames.

Figure number 2.- Shows a profile view of an upper frame in cross-section, with one collapsible side folded out, the stud thereof and the tensioning element of the post.

Figure number 3.- Shows a perspective view of the ball-and-socket joint of the extended arms.

Figure number 4.- Shows a perspective view of the assembly when partially folded up, to be placed upon its box.

Figure number 5.- Shows a perspective view of the awning when open with each side at a different height and with the tarpaulins in place, wherein one may observe the overall appearance.

PREFERRED EMBODIMENT OF THE INVENTION

[0011] With reference to the figures shown, one can see that it is an awning or sunshade (fig. 5), formed by two frames (1) and (2) on the inner sides of which there is an equal number of arms (3) and (4) that fold like scissors and are hinged by means of a hinge (5) which, when extended with the help of the tensioning elements (6), forms a rectangle, under the frames (1) and (2). Likewise, four telescopic tubes fold out in pairs, with several height positions (7) and partially incline outwards with the help of the tensioning elements (8), and serve as posts and structural supports. At the top of the frames, another four longitudinal tubes (9) may be folded out as a continuation of the frames at the sides (10) thereof, upon which they swing and are positioned at 90° or 45° to the perpendicular, remaining secured by each of the corresponding

studs (11). Once the assembly has been folded out, the tarpaulin (12) situated upon the upper structure is fixed thereto by small longitudinal strips of Velcro (13), and when closing it up, from the central tarpaulin there protrudes a cord (14) which, upon folding the sides, penetrates and passes through the holes (15) and (16) to close up the assembly (fig. 4) more comfortably upon the box (17) and tie it up with the strap (18).

[0012] It is deemed unnecessary to make this description any longer in order for anyone skilled in the art to understand the scope of the invention and the advantages deriving thereof.

[0013] The materials, shape, size and arrangement of the elements shall be subject to variation, so long as said variation does not entail an alteration to the essence of the invention.

[0014] The terms in which this specification has been described should always be taken in a broad, non-limiting sense.

Claims

1. A portable folding awning, for use especially on the beach, in the countryside, on terraces or recreation areas, for leisure or relaxation, **characterised in that** it has two parallel and extendible frames.
2. The portable folding awning, according to the first claim, **characterised in that** it has posts folded under the frames in the manner of telescopic tubes.
3. The portable folding awning, according to the preceding claims, **characterised in that** it has a tensioning ball-and-socket joint on the arm of the frame.
4. The portable folding awning, according to the preceding claims, **characterised in that** it has rubber tensioning elements at the ends of the frames, secured to the posts.
5. The portable folding awning, according to the preceding claims, **characterised in that** it has a cord in the top central area of the central tarpaulin.
6. The portable folding awning, according to the preceding claims, **characterised in that** it has small holes in the centre of the side tarpaulins.
7. The portable folding awning, according to the preceding claims, **characterised in that** it has a securing stud.
8. The portable folding awning, according to the preceding claims, **characterised in that** it has two rectangular slots at 90° and 45° to the perpendicular at the ends of the frames.

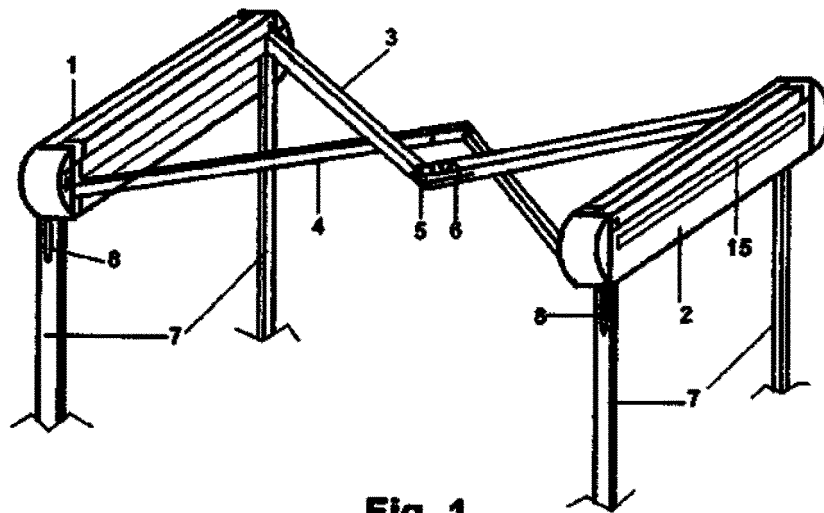


Fig. 1

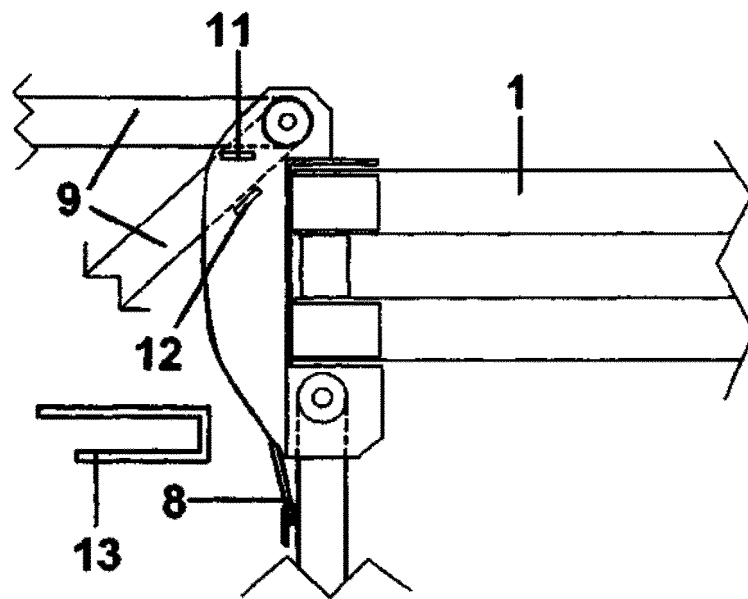


Fig. 2

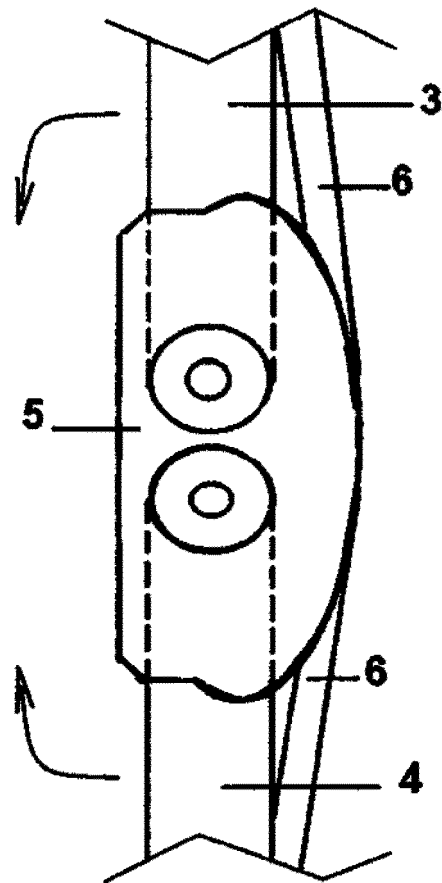


Fig. 3

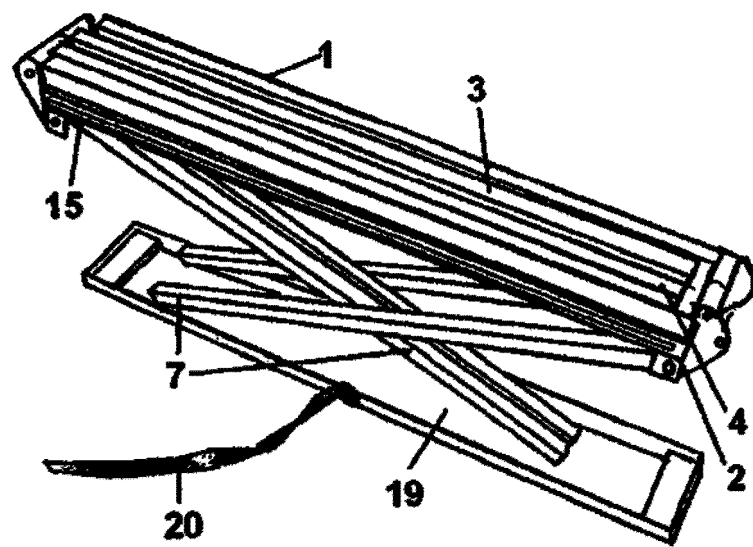


Fig. 4

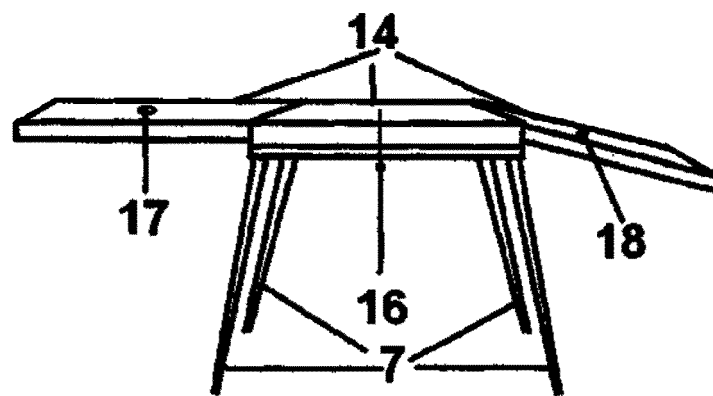


Fig. 5

INTERNATIONAL SEARCH REPORT

International application No.

PCT/ES2013/000084

A. CLASSIFICATION OF SUBJECT MATTER

See extra sheet

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)

E04H15, E04F10, E04H

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)

EPODOC, INVENES

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 1536626 A (PING KUEN AU D) 20/12/1978, page 1, line 9 - page 2, line 94; figures 1 - 5.	1,2
A		3-8
A	US 2010051078 A1 (SY-FACUNDA RONALD MARTIN SY-FACUNDA RON) 04/03/2010, pages 00008 - 0047; figures 1 - 13.	1-8
A	US 5632293 A (CARTER MARK C) 27/05/1997, column 1, line 53 - column 3, line 48; figures 1 - 17.	1-8
A	US 2004255997 A1 (SEO DONG WOOG) 23/12/2004, figures 1 - 17. paragraphs[0005 - 0017];	1-8

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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"P" document published prior to the international filing date but later than the priority date claimed

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Date of the actual completion of the international search

25/07/2013

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/ES2013/000084

Information on patent family members

Patent document cited in the search report	Publication date	Patent family member(s)	Publication date
GB1536626 A	20.12.1978	MY8100284 A HK70680 A	31.12.1981 24.12.1980
----- US2010051078 A1	----- 04.03.2010	----- CN201512985U U CA2677017 A1 US7775229 B2	----- 23.06.2010 28.02.2010 17.08.2010
----- US5632293 A	----- 27.05.1997	----- US2010139729 A1 US7891369 B2 US2010043857 A1 US7845365 B2 US2009217959 A1 US7735505 B2 US2009038666 A1 US7624747 B2 US2008149157 A1 US7530364 B2 US2007251563 A1 US7640943 B2 US2007119494 A1 US7448401 B2 US2007119493 A1 US7363933 B2 US2006162760 A1 US7178542 B2 US2007028954 A1 US7252108 B2 US2005229962 A1 US7051745 B2 US2005155638 A1 US7178541 B2 US2004237423 A1 US6920889 B2 US2004163695 A1 US6926021 B2 US2004094191 A1 US6874520 B2 US2004069337 A1 US6851438 B2 US2003131876 A1 US6701949 B2 US2002189659 A1 US6601599 B2 US2003019516 A1 US6748963 B2 US2002059948 A1 US6502597 B2 US2001025648 A1 US6431193 B2 US6470902 B1	----- 10.06.2010 22.02.2011 25.02.2010 07.12.2010 03.09.2009 15.06.2010 12.02.2009 01.12.2009 26.06.2008 12.05.2009 01.11.2007 05.01.2010 31.05.2007 11.11.2008 31.05.2007 29.04.2008 27.07.2006 20.02.2007 08.02.2007 07.08.2007 20.10.2005 30.05.2006 21.07.2005 20.02.2007 02.12.2004 26.07.2005 26.08.2004 09.08.2005 20.05.2004 05.04.2005 15.04.2004 08.02.2005 17.07.2003 09.03.2004 19.12.2002 05.08.2003 30.01.2003 15.06.2004 23.05.2002 07.01.2003 04.10.2001 13.08.2002 29.10.2002

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/ES2013/000084

Information on patent family members

Patent document cited in the search report	Publication date	Patent family member(s)	Publication date
		US6240940 B1	05.06.2001
		US6382224 B1	07.05.2002
		US6076312 A	20.06.2000
		US5921260 A	13.07.1999
		HK1001288 A1	18.07.2003
		US5797412 A	25.08.1998
		MX9700582 A	31.12.1997
		ZA9506141 A	07.03.1996
		WO9603561 A1	08.02.1996
		RU2140513 C1	27.10.1999
		RO118720 B	30.09.2003
		PL59039Y Y1	28.02.2002
		PL318352 A1	09.06.1997
		NZ289754 A	24.09.1998
		JPH10503249 A	24.03.1998
		JP3566727B B2	15.09.2004
		HU215344 B	28.11.1997
		HUT76745 A	28.11.1997
		EP0804667 A1	05.11.1997
		EP0804667 B1	25.09.2002
		DE69528380T T2	05.06.2003
		CZ9700222 A3	16.07.1997
		CZ293713 B6	14.07.2004
		CN1154154 A	09.07.1997
		CN1104546C C	02.04.2003
		CA2194691 A1	08.02.1996
		CA2194691 C	10.09.2002
		BR9508345 A	23.12.1997
		AU2968895 A	22.02.1996
		AU684978B B2	08.01.1998
		US5511572 A	30.04.1996
US2004255997 A1	23.12.2004	WO2005000069 A2	06.01.2005
		WO2005000069 A3	12.05.2005

Form PCT/ISA/210 (patent family annex) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/ES2013/000084

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CLASSIFICATION OF SUBJECT MATTER

E04H15/58 (2006.01)

E04H15/28 (2006.01)

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