



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
01.06.2005 Bulletin 2005/22

(51) Int Cl.7: **E04F 10/04**

(21) Application number: **04386030.3**

(22) Date of filing: **11.11.2004**

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR**
Designated Extension States:
AL HR LT LV MK YU

(71) Applicant: **Vlachogianni, Marina**
13121 Ilion Attikis (GR)

(72) Inventor: **Vlachogianni, Marina**
13121 Ilion Attikis (GR)

(30) Priority: **12.11.2003 GR 2003100461**

(54) **Folding cylindrical section tent with hidden illumination**

(57) The tent with internal hidden illumination which consists of:

- Construction's external surface.
- The tent's framework part.
- The electrical installation of illumination and the electrically or manually driven system for unfolding and elevating the tent.

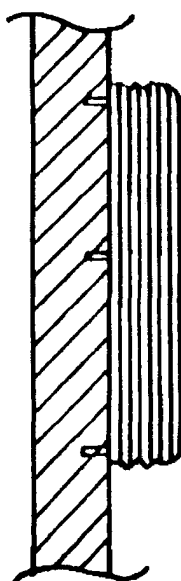
It has the characteristic to defer from common tents

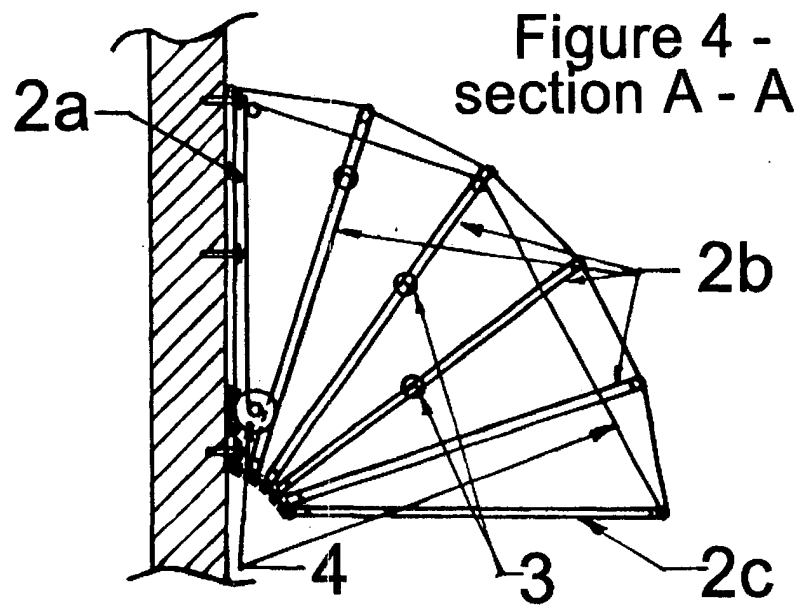
in that it internally has hidden illumination with lamps which lean on the folding rings and that the lamps do not hinder the tent's unfolding - elevation but, to the contrary, they follow a parallel course.

It is easy and safe and promotes the space on which it is placed.

It is constructed in desirable sizes of unlimited combinations and in accordance with the customer's desires. As well as in two models, either with electrical or manual traction and repulsion of the tent's unfolding and elevation strings.

**Figure 3 -
side view of closed tent**





Description

[0001] The invention refers to a specifically designed tent with internal built-in hidden illuminating device, specifically designed to face the needs for covering the stores external needs for illumination in the best possible aesthetic way. The construction consists of a waterproof PVC sheet surface, of a shape of a cylindrical sector from zero through ninety degrees, closed from all sides, based on the wall (store's facade), where it is being folded either by mechanical or manual way.

[0002] At the interior space the device has series of illuminating devices of fluorescent tubiform type which, when the device either opens or closes, is moving in parallel with the external cylindrical surface. The construction's feature consists to the general final form of the tent and the aesthetic result being achieved, which is a result of the specially leaning and moving mechanism of the illuminating devices during the tent's operation.

[0003] Tents of cylindrical sector type with opening and unfolding devices are well known and broadly prevalent today. Yet the tents presented in the market through this time do not have hidden illumination and they are not close from below (horizontal area).

[0004] The construction being presented hides the unfolding, leaning and illuminating devices and, for this reason, has an aesthetic result in combination with the innovation of hidden illumination which, during night time, is remarkable. Its construction characteristic is also its double use which consists to the fact that when the tent in closed (with the lower surface on vertical position on the wall) also constitutes an advertising plate for the store.

[0005] As an advantage of the device is also the placement, internally by built-in and safe way of the series of illuminating devices of fluorescent tubiform type which emphasises it and provides a pleasant environment all around and under it.

[0006] The cabling and electrical connections being required, together with the illuminating devices, are closed within a construction and in special "flexible type" proper tubes and they are not visible. The construction way is relatively simple and the dimensions, as far as it concerns the construction, vary as for the width and the radius of the tent's circular sector. Its leaning is carried out by special bending bolts on the vertical surface (store's facade) in the well known way. The specific construction has been designed and may operate either by electrical device with the assistance of monophasic reducer, yet for financial and specific reasons it will be also constructed with a manual mechanism.

[0007] During nighttime with the illumination of the total of the external surfaces presents its variation from classical tents and arouses walkers from a long distance.

[0008] This invention may be fully understood by the following description in combination with the attached drawings in which it is being shown both the layout of

the device as well as its general top view in full opening.

INVENTION DESCRIPTION

[0009] The invention consists of the parts being described below:

(A) Construction's external area consisting of:

- a. Upper waterproof PVC sheet, curved part.
- b. Lower waterproof PVC sheet, flat part.
- c. Side waterproof PVC sheets.

(B) Tent's frame part consisting of:

- a. Initial open ring □ shape, tent's fixation base.
- b. Intermediate folding □ shape rings.
- c. Final folding closed ring of rectangular parallelogram shape.
- d. Articulated plastic rings seating bearer to the right and to the left.

(C) Illumination electrical installation.

(D) Tent's unfolding and elevation system, either electro driven or manual. The construction as it appears in the drawing consists of the tent's surrounding area. This consists of three parts.

[0010] The upper curved surface which consists a circular sector surface. of a width which coincides with the tent's width and a radius being determined by the construction conditions, the two side surfaces which form circle quadrants, the lower tent's surface which is of a rectangular parallelogram shape which, when the tent is open, is at the horizontal position.

[0011] The material being used for the whole surface is of the same quality and it is waterproof semi-transparent PVC sheet of various colours, so that with the existing hidden illumination to offer intense and pleasant presence to the surrounding area with high

[0012] Aesthetic result.

[0013] The aforesaid surface from PVC sheet is bridled by a frame part which consists of pieces of plastic and aluminum.

[0014] The said pieces being combined among them form open and closed rings, folding or not, having as a final result the safe elevation of the tent (opening - closing).

[0015] We, therefore, have the first open ring which at the same time is leaning base for the whole construction.

[0016] Leaning is carried out by special bending bolts on the vertical surface of the store's facade in the well known way.

[0017] The said ring will have a Π shape and consists either by two articulated plastic bases, which have the capacity to accept additionally other bases as chain, so that other rings to be fixed on them as well.

[0018] The intermediate folding rings are fixed on the articulated plastic bearer and they have the ability to move around and axis which pass from the two articulated leaning bases. In this case they open and close as one sided blower.

[0019] The final closed folded ring also consists by articulated bases on which the whole ring is banked on.

[0020] Each ring now, in order to form the open (II shape) or closed rectangular parallelogram, uses for the rectilinear parts of it an aluminum profile of rectangular cross section in proportion with the tent's dimensions.

[0021] As joints for the closing of the angles plastic angular 90° fixtures are being used which, entering as spheres inside the aluminum profiles, establish a strong frame construction.

[0022] The external perimeter of these rectangular rings has a socket for the fixation waterproof PVC sheet, so that to provide the final desired construction.

[0023] The constructor's quintessence is the hidden illumination which is provided by tubiform illuminating devices of fluorescent type connected with flexible type proper tubes which are not visible.

[0024] The illuminating devices are placed in rectilinear bases of fluorescent illuminating devices of tubiform type 1 x 18 Watts or 1 x 36 Watts in two series placed in such a way that they will provide illumination uniformity to the construction.

[0025] The turning on of the illuminating devices is carried out through a specially placed switch and is independent from the tent's electrical operation.

[0026] The tent's unfolding and elevation system is carried out by a system of plastic small pulleys being placed at the tent's interior and plastic high strength flexible strings, so that by pulling the strings downwards the tent will be in the position to open and to close simultaneously from its both sides.

[0027] The strings traction for the tent's elevation and its release is being also achieved by the placement of an electrical reducer which has a drum where the strings are rolled and released.

[0028] The electrical reducer is of power in proportion with the construction, monophase, 220V 50 Hz of closed type.

[0029] The hidden illumination, finally, is the one which gives emphasis to the construction by the best possible appearance.

[0030] The cloth sheets being used are the well known common one with waterproof ability, capable for external use and in various designs, lengths and shapes as far as it regards the coverage of their surfaces.

II. The tent's framework part.

III. The electrical illumination installation.

IV. The tent's electrical or manual unfolding and elevation system.

2. This tent in accordance with the claim has the characteristic that it internally has hidden illumination with lamps which lean on the folding rings of the tent's framework part and that the lamps do not hinder the tent's unfolding - elevation (opening - closing), to the contrary they follow a parallel course without hindering the movement and without being in contact with the plastic PVC.

3. The hidden illumination tent is manufactured in two models, with electrical motion and manual motion and is the sole through today which is closed downwards at the horizontal surface at unfolded position, visually hiding the mechanisms and the parts it contains

Claims

1. The tent with internal hidden illumination consists of:

I. External surface of the construction.

Figure 1 - facade

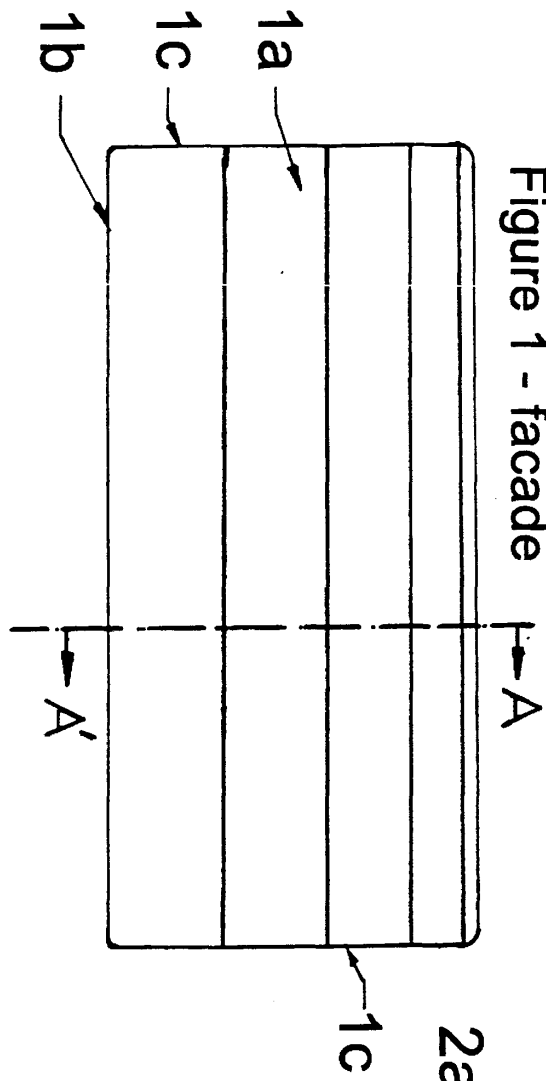


Figure 2 - top view

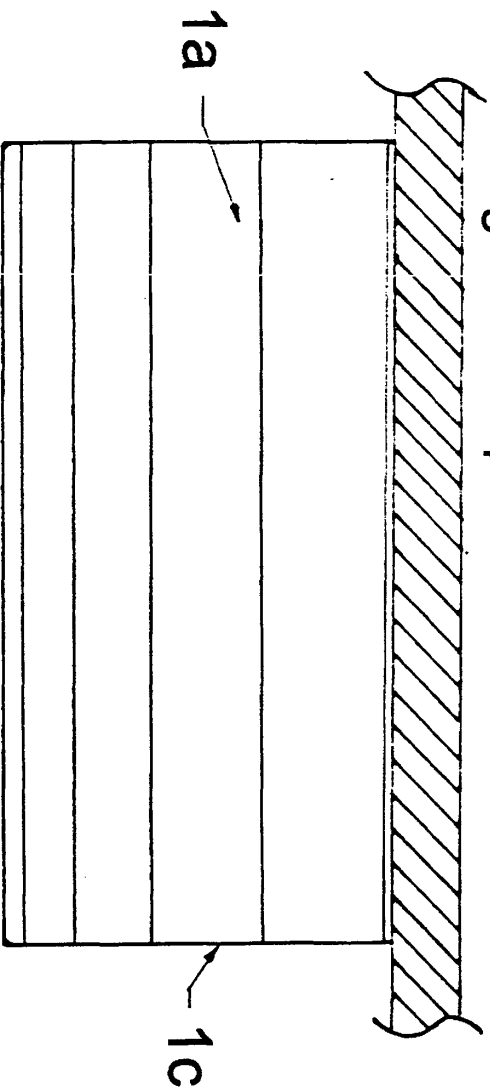


Figure 4 - section A - A

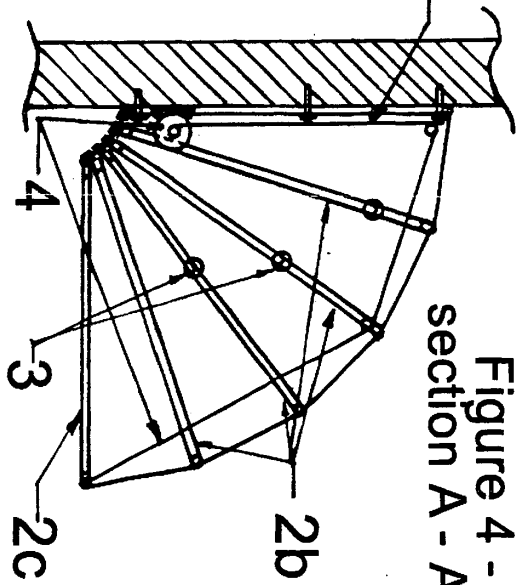


Figure 3 - side view of closed tent

