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(54) **Removable protection-display device for pillars**

(57) A removable protection device, preferably a protection-display device, for pillars (1), in particular pillars in car park storeys and garages, comprising a flexible plate (2) of a layered construction comprising a base (3), preferably made of an elastomeric material, which has a thickness of between about 10 mm and about 15 mm and a width that is suitably less than a circumferential length of the pillar (1) on which the device is to be installed, and a sheet element (4), preferably a fireproof, self-adhesive sheet element, and more preferably a canvas, which is permanently fitted to the external face of the base (3), and added-on end pieces (5) which overlap the respective ones of the vertical end strips of the flexible plate (2) and are each joined to an inner face of the base (3) and the sheet element (4) to form loops, which define casings (6) into each of which rods (7), preferably hardened rods, are inserted (7), wherein the casings (6) have open sections (8) opposite one another in which the rods (7) are exposed and connected to one another to form a seam in the flexible plate (2), preferably using corresponding clips (9) which are of a size that is suitably smaller than the distance between the rods (7).

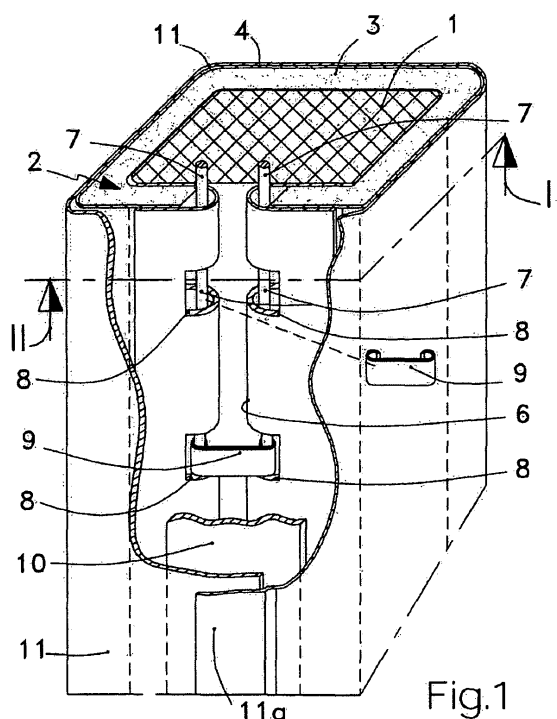


Fig.1

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Description

FIELD OF THE INVENTION

[0001] The present invention relates to a device for protecting pillars, such as columns, in particular pillars of car park storeys or garages, from impacts from and scuffing by moving vehicles, which also allows for the display of advertisements and/or information.

PRIOR ART

[0002] The pillars in car park storeys are continuously hit or scuffed by vehicles, resulting in damage both to the vehicles and the pillars, which then crumble, and become unattractive and weaken.

[0003] In order to prevent this damage, attempts have been made to protect pillars using corner pieces and even advertising and information media.

[0004] The existing systems used on pillars are invasive, in requiring anchorage points to be installed on the pillars, damaging the pillars and being such as to cause the impact from vehicles to be transmitted to the cores of the pillars through the anchorage points.

[0005] Also, these systems are not easily removable when being relocated from one pillar to another, and, once removed, traces of the previous anchorage points remain.

[0006] Another disadvantage of the known systems is that those systems are especially made for an individual pillar, and, in being secured using anchorage points, do not allow for transfer to another pillar. Also, such transfer is particularly labour-intensive and lengthy.

[0007] On this basis, using such pillars as an advertising medium is highly impractical, bearing in mind that this activity involves not only frequent changes to the advertisements from a single advertiser, who can use the same media already anchored to the pillar, but also frequent changes in advertiser, and hence, in the type and configuration of the means anchored to the pillar.

[0008] Another particular drawback of the prior art systems is that the means used to encircle the pillars are too thick to be properly matched at their edges.

[0009] The difficulties in making dimensional changes to the known systems in this regard are accentuated by the varying nominal sizes of pillars and the differences within pillars of the same nominal size.

DESCRIPTION OF THE INVENTION AND ITS ADVANTAGES

[0010] In the light of this prior art, the present invention proposes a removable protection-display device, which is designed for use on pillars in car park storeys and the like.

[0011] In one aspect this removable protection-display device comprises a flexible plate of a layered construction which comprises a base made from a fireproof elas-

tomeric material, which has a thickness of between 10 mm and 15 mm and a width that is suitably less than a circumference of the pillar on which it is to be installed, and a self-adhesive canvas, preferably fireproof, which is permanently fitted on top of the visible external face of the base, and added-on end pieces which overlap respective ones of the vertical end strips of the flexible plate and are joined to the inner face of the base and the canvas to form loops, which define casings into each of which hardened rods are inserted, wherein the casings have open sections exactly opposite one another, in which the hardened rods are exposed and connected to one another using corresponding clips, which together form a seam in the flexible plate encircling the pillar and are of a size that is suitably smaller than the distance between the hardened rods.

[0012] The canvas may contain advertising material or information, or a removable fireproof sheet containing advertising or information may be fitted over the canvas.

[0013] Implementing this device involves encircling the pillar with the flexible plate, tightening the flexible plate using the hardened rods inserted in the casings, and fitting clips between the opposed hardened rods to keep the flexible plate tensioned flat against the contours of the column, which is also facilitated by the reduced thickness of the flexible plate, ensuring a high degree of foldability at its edges.

[0014] With the device produced in this way, a three-fold function is achieved: firstly, pillars and vehicles are protected from impacts and scuffing, because energy is absorbed by the elastomer-based foam material incorporated for this purpose; secondly, the device is dismantled simply by removing the clips, thus avoiding any damage to or impairment of the pillar or the device itself during this operation, enabling it to be reused and relocated to another pillar, with the same clips or other appropriate means merely needing to be fitted; and thirdly, and in connection with the above, the recommended device is particularly suitable for the incorporation of advertising messages and information due to its ease of replacement, which allows advertising messages or information to be quickly and easily changed, either by replacing the canvas fitted on top of the elastomeric base with another canvas, or by replacing the sheet fitted on top of the canvas covering the elastomeric base with another sheet.

[0015] Although apparent from the foregoing, an interesting characteristic of the present invention is that the means purely intended for advertising or information purposes are separate from the means used to ensure the protection of the pillars.

DRAWINGS

[0016] In order better to understand the nature of the present invention, a preferred industrial embodiment, intended merely as an illustrative but not definitive example, is illustrated in the attached drawings.

[0017] Figure 1 is a perspective view showing a section

of a pillar 1 fitted with a protection-display device in accordance with a preferred embodiment of the present invention. In this embodiment the device comprises an elastomeric base 3, and a canvas 4 and a sheet 11 which are fitted to the base 3, where all components are fireproof. For ease of illustration, a first clip 9 is shown fitted to the opposed coupling rods 7, and a second clip 9 is shown as being fitted to the opposed coupling rods 7.

[0018] Figure 2 illustrates an enlarged sectional view (section II-II) in Figure 1.

[0019] Figure 3 illustrates a perspective view showing three clips 9 of different lengths, which are provided in order to enable matching of the extension corrections as required by the flexible plate 2.

[0020] The following reference numerals are used in the drawings:

- 1. - Pillar or column
- 2. - Flexible plate
- 3. - Fireproof elastomeric base
- 4. - Fireproof canvas
- 5. - Added-on end pieces
- 6. - Casing
- 7. - Hardened rods
- 8. - Vertical openings
- 9. - Clips
- 10. - Adhesive strip
- 11. - Fireproof sheet (self-adhesive)
- 11a. - Overlapping strip of the sheet (11)

DESCRIPTION OF A PREFERRED EMBODIMENT

[0021] With reference to the drawings, a preferred embodiment of the present invention, relating to a removable protection-display device for pillars 1 in car parks and the like, is illustrated.

[0022] The protection-display device comprises a flexible plate 2 of a layered construction, which comprises a base 3 made from a fireproof elastomeric material, which has a thickness of between 10 mm and 15 mm and a width that is suitably less than the circumferential length of the pillar 1 on which the device is to be installed, a fireproof, self-adhesive canvas 4 which is permanently fitted to the external face of the base 3, and end pieces 5 at each of the respective vertical edges of the flexible plate 2, each of which are joined to the inner face of the base 3 and overlap the canvas 4 to form a loop.

[0023] The end pieces 5 encompass the respective vertical edges of the flexible plate 2 to form casings 6 into which hardened rods 7 are inserted.

[0024] The casings 6 have open sections 8 opposite one another, in which the hardened rods 7 are exposed and connected to one another using corresponding clips 9 which together form a seam in the flexible plate 2 encircling the pillar 1 and are of a size that is suitably smaller than the distance between the hardened rods 7.

[0025] As illustrated in Figure 2, the device includes an adhesive strip 10 of sufficient width to cover the seam

as formed by the clips 9, so that, once installed, the entire peripheral surface of the device is attractive.

[0026] In this embodiment clips 9 are available in different body lengths to match the extension corrections needed by the flexible plate 2, both for different pillars 1 and for different heights in a single pillar 1.

[0027] As illustrated in the drawings, the device is simple, fast and clean to install on a pillar 1, this being achieved without damaging the pillar 1 in any way.

10 [0028] A flexible plate 2 of appropriate height is wrapped around a pillar 1, and, using appropriate clips 9, the flexible plate 2 is tensioned to the pillar 1, where this tensioning is facilitated by the flexibility and thickness of the elastomeric foam forming the base 3.

15 [0029] In this embodiment a canvas 4 is attached to the base 3, and in one embodiment the canvas 4 can carry advertising and/or information.

[0030] In an alternative embodiment a fireproof sheet 11, which can carry advertising and/or information, is removably fitted over the canvas 4, by overlapping overlapping strips 11a of the sheet 11.

[0031] In this embodiment all of the materials of the device have a fire rating of M1.

25 [0032] Finally, it will be understood that the present invention has been described in its preferred embodiment and can be modified in many different ways without departing from the scope of the invention as defined by the appended claims.

30 [0033] In one embodiment the protection-display device comprises a plurality of modules of various heights, which can be combined with one another in accordance with the more common heights of pillars 1. For example, modules of 1 m and 0.30 m encompass heights of 2 m (1 m + 1 m) and 1.30 m (1 m + 0.30 m).

35 [0034] In another embodiment the canvas 4 and the sheet 11 can comprise reflective and/or fluorescent materials, where these elements are typically made using a reflective material which is given a paint-resistant treatment.

40 [0035] In a further embodiment the flexible plate 2 comprises a base board in order to prevent potential damage from sweeping machinery.

45 [0036] In a yet further embodiment the hardened rods 7 can be connected, and thus the flexible plate 2 tensioned, using any other suitable tensioning means, such as ropes, clamps, adjustable tensioners and the like.

Claims

- 50
1. A removable protection device, preferably a protection-display device, for pillars (1), in particular pillars in car park storeys and garages, comprising a flexible plate (2) of a layered construction comprising a base (3), preferably made of an elastomeric material, which has a thickness of between about 10 mm and about 15 mm and a width that is suitably less than a circumferential length of the pillar (1) on which the
- 55

device is to be installed, and a sheet element (4), preferably a fireproof, self-adhesive sheet element, and more preferably a canvas, which is permanently fitted to the external face of the base (3), and added-on end pieces (5) which overlap the respective ones of the vertical end strips of the flexible plate (2) and are each joined to an inner face of the base (3) and the sheet element (4) to form loops, which define casings (6) into each of which rods (7), preferably hardened rods, are inserted (7), wherein the casings (6) have open sections (8) opposite one another in which the rods (7) are exposed and connected to one another to form a seam in the flexible plate (2), preferably using corresponding clips (9) which are of a size that is suitably smaller than the distance between the rods (7).

2. The device of claim 1, further comprising an adhesive strip (10) of sufficient width to cover the seam. 5
3. The device of claim 1 or 2, wherein the clips (9) are available in different body lengths to match extension corrections as required by the flexible plate (2), both to allow for fitting to different pillars (1) and at different heights in a single pillar (1). 10
4. The device of any of claims 1 to 3, wherein the sheet element (4) can carry advertising or information material. 15
5. The device of any of claims 1 to 4, further comprising a sheet (11), preferably a fireproof sheet, which is removably fitted on top of the sheet element (4). 20
6. The device of claim 5, wherein the sheet (11) can carry advertising or information material. 25
7. The device of claim 5 or 6, wherein a removable fastening for the sheet (11) is provided by overlapping strips (11a) of the sheet (11). 30
8. The device of any of claims 1 to 7, wherein the flexible plate (2) comprises modules of various heights, which can be combined with one another to provide devices of different heights. 35
9. The device of any of claims 1 to 8, wherein the flexible plate (2) includes a base board. 40
10. The device of any of claims 1 to 9, wherein the sheet element (4) and the sheet (11) comprise reflective and/or fluorescent material. 45
11. The device of any of claims 1 to 10, wherein the rods (7) are connected and the flexible plate (2) is tensioned by tensioning means, such as ropes, clamps, and adjustable tensioners. 50

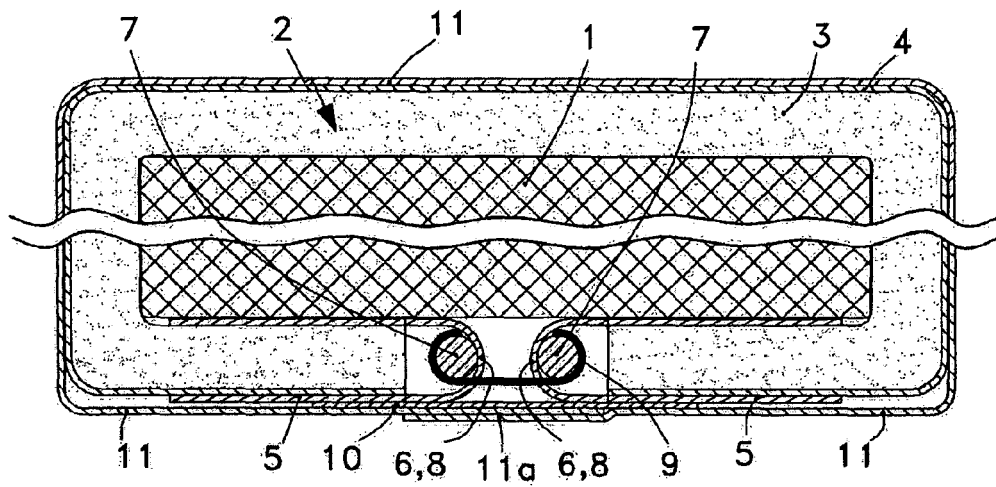


Fig. 2

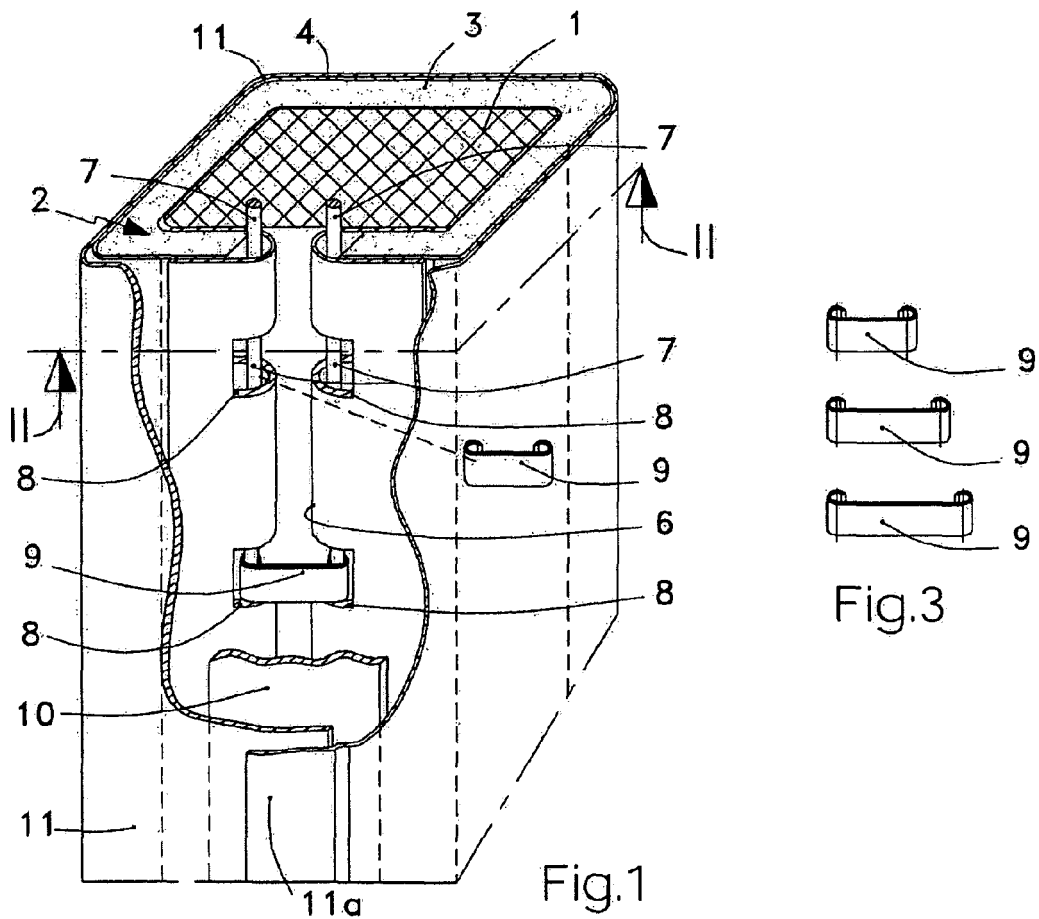


Fig. 1

Fig. 3