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(54) **BARRIER POST**

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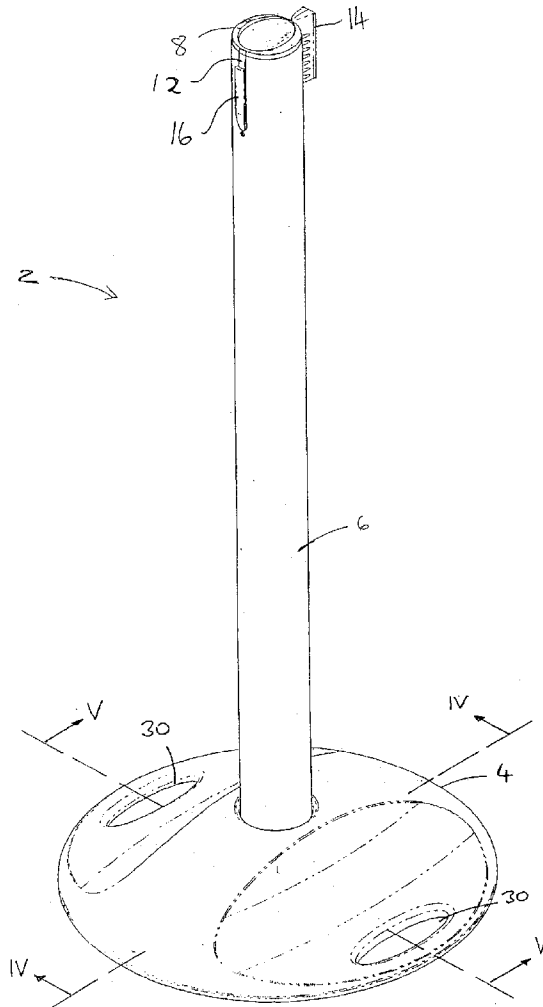
(57) **ABSTRACT**

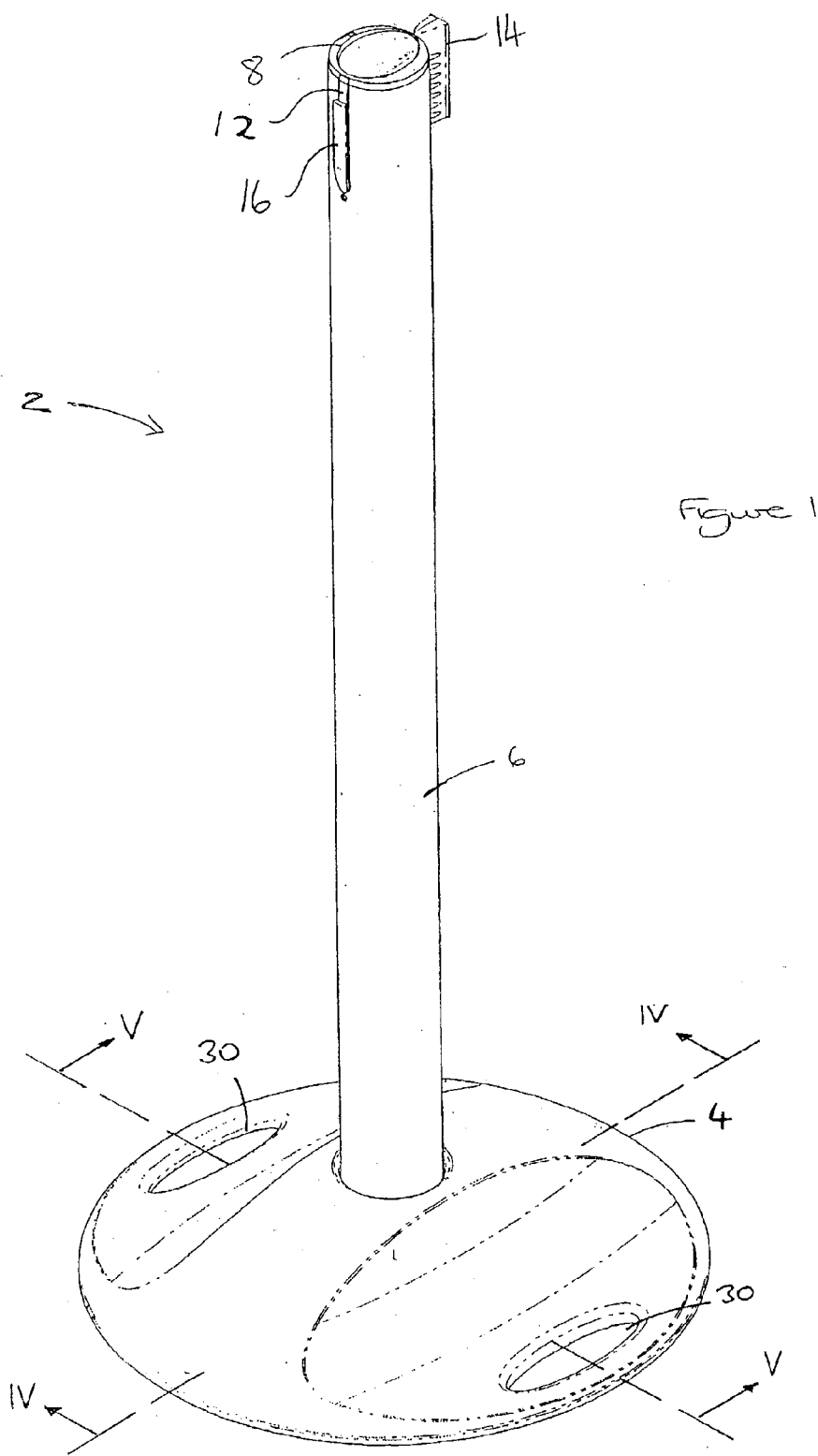
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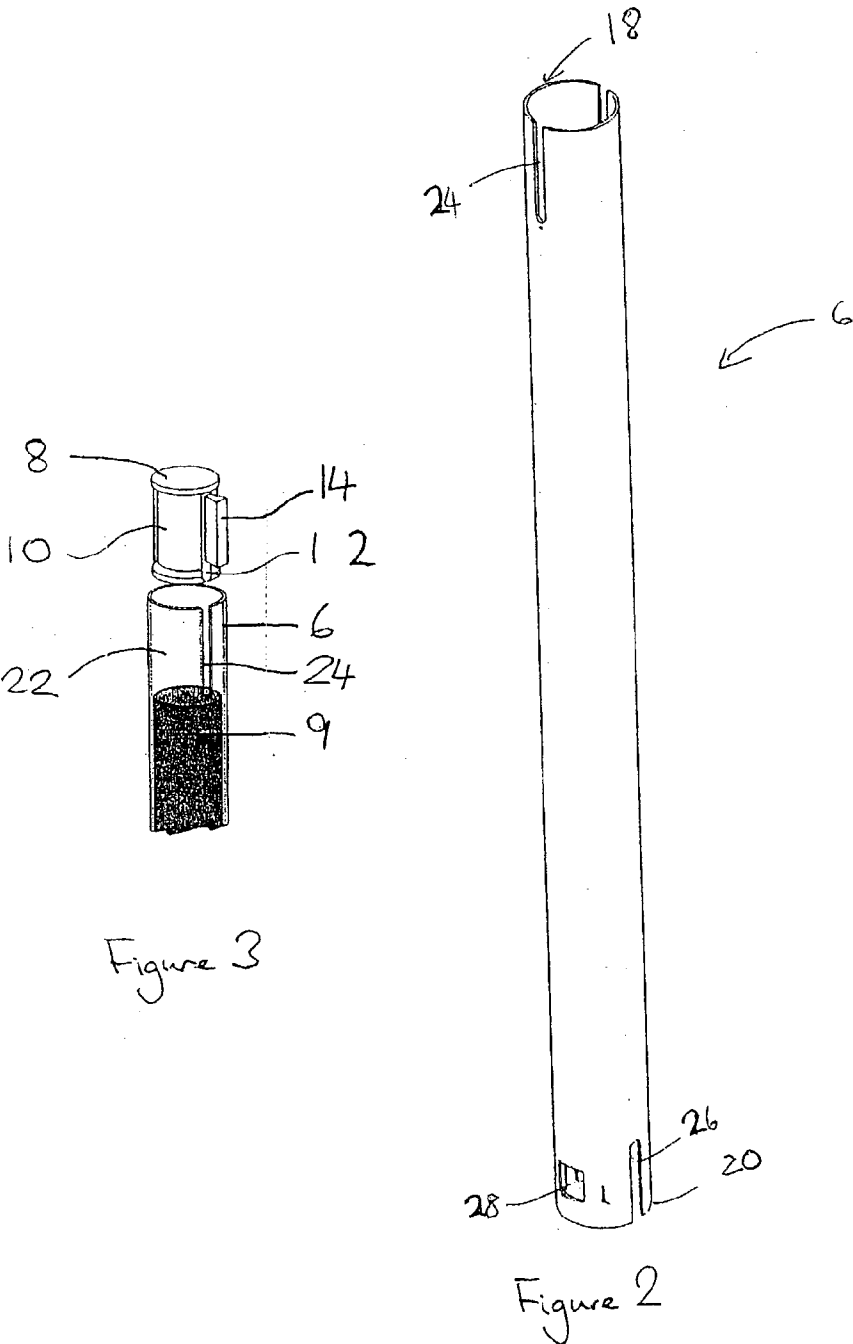
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A barrier post for a personnel barrier system, includes a column (6) that, in use, is arranged substantially vertically, a support base (4) at the lower end of the column and a divider assembly (8) towards the upper end of the column. The column (6) is at least partially hollow and has an internal chamber (22) defined by a circumferential wall, said wall being at least partially transparent.







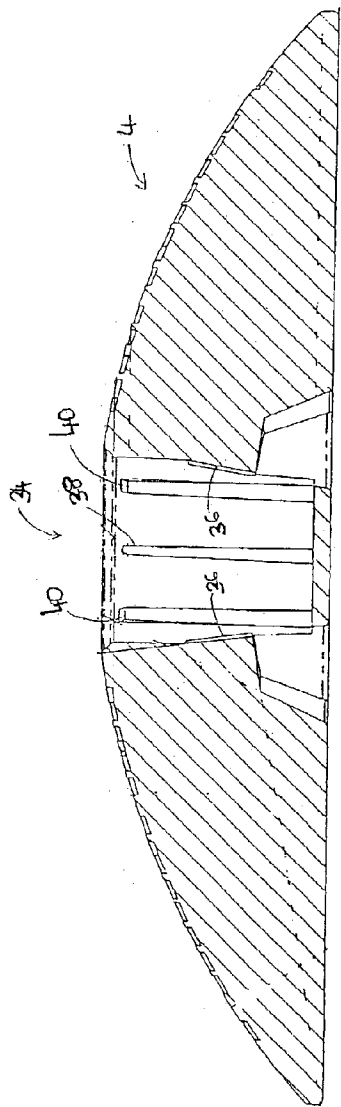


Figure 4

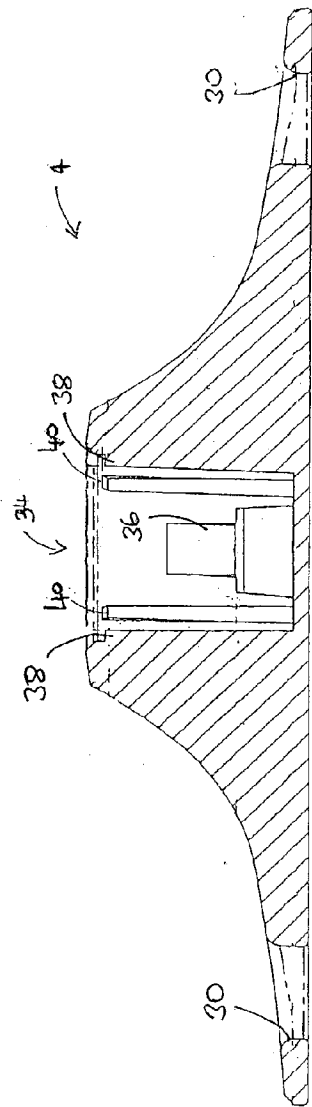


Figure 5

BARRIER POST

[0001] The present invention relates to a barrier post and in particular, but not exclusively, a barrier post for use in a personnel barrier system.

[0002] Personnel barrier systems are used in many situations to control the movement of people, for example for pedestrian guidance, to control queues, and to restrict movement and/or access. Such barrier systems typically include a set of barrier posts that can be interconnected by ropes, tapes or rails. Each barrier post includes an upright column supported by a heavy base to prevent the column from tipping over.

[0003] The columns are normally made from metal (e.g. steel or aluminium) or a rigid plastics material, and usually have a neutral colour (e.g. grey or silver) to avoid clashing with the colour scheme of their surroundings. The posts cannot readily be adapted to complement the colour scheme of their surroundings.

[0004] Personnel barrier systems are sometimes used in shops, for example to control queues at tills. Such a situation provides an ideal opportunity for marketing goods or services, or advertising generally. However, existing barrier systems are not well suited to this purpose.

[0005] It is an object of the present invention to provide a barrier post for a personnel barrier system that mitigates at least some of the aforesaid disadvantages. In particular, it is a preferred object of the invention to provide a barrier post that can be used for advertising and promotional purposes and/or that can be adapted to different colour schemes.

[0006] According to one aspect of the present invention there is provided a barrier post for a personnel barrier system, including a column that, in use, is arranged substantially vertically, a support base at the lower end of the column and a divider assembly towards the upper end of the column, wherein the column is at least partially hollow and has an internal chamber defined by a circumferential wall, said wall being at least partially transparent.

[0007] A printed poster or advertisement (or any other suitable goods or materials) may be inserted into the chamber and seen through the clear walls of the column. This allows the barrier post to be used for advertising purposes, or it may simply be coloured or patterned to complement the colour scheme of its surroundings.

[0008] Advantageously, substantially the entire column is made of a transparent material, which is preferably a clear plastics material, for example polycarbonate. The column preferably comprises a substantially cylindrical tube. Advantageously, chamber extends substantially the entire length of the column.

[0009] The barrier post may include a support member for insertion into the chamber. The support member preferably comprises a rigid tube. This ensures that any printed materials inserted into the column are supported correctly.

[0010] The divider assembly may include a retractable tape cartridge. Alternatively, the divider assembly may use ropes, chains or rails. Preferably, the divider assembly is removable to provide access to the chamber.

[0011] The support base may include a heavy plate-like member. Preferably, the support base is removable.

[0012] According to a second aspect of the present invention there is provided a column for a barrier post as defined above, the column being at least partially hollow and having an internal chamber defined by a circumferential wall, said wall being at least partially transparent, the column having at a first end thereof a receiving means for a divider assembly and at a second end thereof locating means for a support base.

[0013] Advantageously, the receiving means includes a substantially cylindrical wall having at least one opening therein. The opening preferably comprises a slot that extends axially from the first end of the column.

[0014] Advantageously, the locating means includes a locking formation for engagement with a complementary locking formation on the base.

[0015] An embodiment of the present invention will now be described by way of example with reference to the accompanying drawings, in which:

[0016] **FIG. 1** is an isometric view of a barrier post, including a column, a tape cartridge and a support base;

[0017] **FIG. 2** is an isometric view of the column;

[0018] **FIG. 3** is an isometric view showing the upper part of the column, a tape cartridge and a support member;

[0019] **FIG. 4** is a sectional view of the base along line IV-IV of **FIG. 1**; and

[0020] **FIG. 5** is a sectional view of the base along line V-V of **FIG. 1**.

[0021] As shown in **FIGS. 1 to 3**, the barrier post **2** comprises a support base **4**, a column **6**, a tape cartridge **8** and a support tube **9**.

[0022] The tape cartridge **8** is of a conventional design and includes a substantially cylindrical housing **10** having two support ribs **12** that extend radially outwards from the cylindrical wall of the housing. A divider tape is wound onto a spring-loaded reel (not shown) that is mounted within the housing and extends outwards through a slot in one of the ribs. A connector device **14** is attached to the free end of the tape. A complementary attachment formation **16** is provided on the other rib **12**, on the opposite side of the housing. The divider tape can be extended from the top of one post and connected to the attachment formation on another post a few metres away, thereby creating a personnel barrier.

[0023] The column **6**, which is shown in detail in **FIG. 2**, is made of a transparent rigid plastics material such as polycarbonate and comprises a hollow cylindrical tube with an upper end **18** and a lower end **20**. The cylindrical wall of the column **6** defines an internal chamber **22** that extends substantially the entire length of the column **6**. The column is approximately 950 mm in length and has a diameter of approximately 65 mm.

[0024] The support tube **9** is made of a rigid plastic material and is slightly smaller in diameter and length than the column, allowing it to fit into the chamber **22**, as shown in **FIG. 3**. The tube **9** may be used to support a rolled sheet of paper or similar printed material (for example a poster) within the chamber **22**, allowing a design (for example, an advertisement, pattern or colour) printed on the paper to be seen through the clear walls of the column **6**.

[0025] At the upper end **18** of the column, formations **24** are provided for receiving the tape cartridge **8**. The receiving formations **24** comprise two symmetrical U-shaped slots, provided on opposite sides of the column. The slots are approximately 80 mm in length and approximately 8 mm wide. The tape cartridge **8** fits into the top of the column and is aligned and supported by means of the two ribs **12**, which fit into the slots.

[0026] At the lower end **20** of the column, locating formations are provided for locating the column in the support base **4**. The locating formations include two symmetrical U-shaped slots **26** provided on opposite sides of the tube and two square windows **28**, which are situated approximately 20 mm above the lower end **20** of the column.

[0027] The base **4**, which is shown in detail in **FIGS. 4 and 5**, is made of a dense material such as recycled rubber composites and is sufficiently large and heavy to prevent the post from tipping over in normal circumstances. The base **4** comprises a plate-like member that is essentially dome shaped and has two handles **30**, which are located towards the edges of the base. In the centre of the base there is provided a vertical passageway **34** that is arranged to receive and support the column **6** in an upright position. Two inwardly-extending detents **36** are provided on the walls of the passageway to engage the windows **28** in the lower end of the column. At 90° to the detents **36** there are two symmetrical vertical ribs **38**, which engage the slots **26**. Four shallower ribs **40** are also provided, which engage and support the cylindrical wall of the column **6**.

[0028] To assemble the base **4** and column **6**, the column **6** is inserted into the passageway **34**, so that the slots **26** at the base of the column are aligned with the ribs **38**. The column **6** is then pushed downward so that the base and column both deform slightly, allowing the detents **36** to engage the windows **28**. A tool may be provided for depressing the detents to allow the column to be removed from the base.

[0029] A printed sheet (a poster, advertisement or other suitable material) is then wrapped around the support tube **9** and inserted into the chamber **22** within the column **6**. The tape cartridge **8** is then located in the upper end **18** of the column, thereby sealing the printed sheet within the column.

[0030] The clear walls of the column **6** allow the printed sheet to be seen. This allows the barrier post to be used for advertising purposes, or it may simply be coloured or patterned to complement the colour scheme of its surroundings.

[0031] The support tube **9** is an optional component and may be omitted. If the rolled sheet of paper or printed matter is sufficiently resilient, it will support itself when placed in the column **6**, so that it fits exactly to the inner surface of the column.

[0032] Alternatively, the printed sheet and the support tube may be omitted and the chamber **22** may instead be filled with other items to produce different effects. For example, the tube can be filled with small objects (e.g. sweets or lottery balls) for marketing purposes, or with

battery powered lights, or with other materials that produce an aesthetically pleasing effect. Further, if the lower end of the tube is sealed, it may be filled with water or other liquids, which may be coloured, or filled with bubbles or floating objects (in the manner of a decorative "lava lamp").

[0033] Various modifications of the barrier post are of course possible. For example, the tape cartridge **8** can be replaced with supports for other types of divider, such as ropes, rails and chains, and the support base may be removable or permanently attached. The top and base of the column can be modified to receive different shaped divider supports and bases. The shape and size of the column may also be varied. Further, the column may be only partially clear, for example including a clear upper part and an opaque lower part, or it may include a number of clear windows.

1. A barrier post for a personnel barrier system, including a column that, in use, is arranged substantially vertically, a support base at the lower end of the column and a divider assembly towards the upper end of the column, wherein the column is at least partially hollow and has an internal chamber defined by a circumferential wall, said wall being at least partially transparent.

2. A barrier post according to claim 1, in which substantially the entire column is made of a transparent material.

3. A barrier post according to claim 2, in which the column is made of a clear plastics material.

4. A barrier post according to claim 1, in which the column comprises a substantially cylindrical tube.

5. A barrier post according to claim 1, in which the chamber extends substantially the entire length of the column.

6. A barrier post according to claim 1, including a support member for insertion into the chamber.

7. A barrier post according to claim 6, in which the support member comprises a rigid tube.

8. A barrier post according to claim 1, in which the divider assembly includes a retractable tape cartridge.

9. A barrier post according to claim 1, in which the divider assembly is removable to provide access to the chamber.

10. A barrier post according to claim 1, in which the support base includes a heavy plate-like member.

11. A barrier post according to claim 1, in which the support base is removable.

12. A column for a barrier post as defined in claim 1, the column being at least partially hollow and having an internal chamber defined by a circumferential wall, said wall being at least partially transparent, the column having at a first end thereof a receiving means for a divider assembly and at a second end thereof locating means for a support base.

13. A column according to claim 12, in which the receiving means includes a substantially cylindrical wall having at least one opening therein.

14. A column according to claim 13, in which the opening comprises a slot that extends axially from the first end of the column.

15. A column according to claim 12, in which the locating means includes a locking formation for engagement with a complementary locking formation on the base.

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