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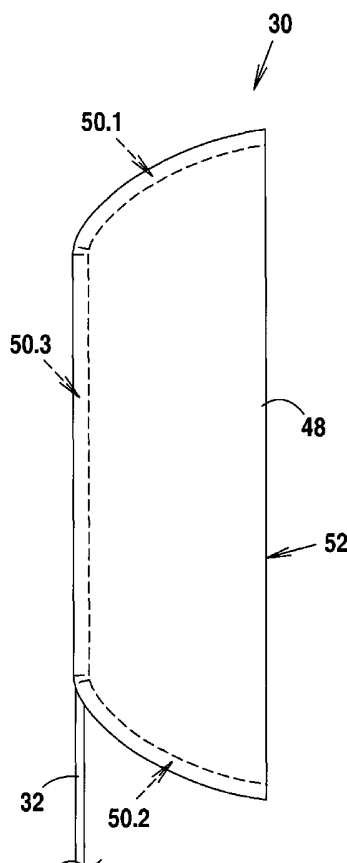
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(54) Title: A FLAG



(57) Abstract: The invention relates to a flag (30) that includes an elongate pole (32), a display sheet (48) that has display matter applied thereto and two sheet engagement formations that engage the display sheet (48) and that are operatively :Located on the pole (32) in a configuration in which the display sheet (48) is held in a tensioned display configuration. The sheet engagement formations include elongate elements, that are operatively located in seams (50.1, 50.2) defined therefor in perimeter edge regions of the display sheet (48), and formations, that can be located in an adjustable spaced relationship on the pole (32) with the elongate elements projecting therefrom, to provide for tensioning of the display sheet (48). Where the elongate elements are resiliently flexible the tensioning of the display sheet (48) is enhanced and different perimeter profile display sheets can be accommodated.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

- 1 -

A FLAG

THIS INVENTION relates to a flag.

The invention relates particularly to a flag of the type that includes a display sheet and a pole on which the sheet is carried, the display sheet, in its operative configuration,
5 serving to display matter applied thereto, by printing or otherwise, e.g. for advertising purposes.

According to the invention there is provided a flag, which includes

10 an elongate pole;

two sheet engagement formations of which at least one engagement formation includes an elongate element and which are operatively located in an adjustable spaced apart configuration along the length of the pole; and

15

a display sheet that is operatively held in a tensioned mode between the two sheet engagement formations by being engaged with the sheet engagement formations and by the sheet engagement formations being located in a suitable spaced apart configuration, the elongate element of the at least one sheet engagement formation, in
20 the operative configuration of the flag, extending away from the pole and being engaged with the display sheet by the location thereof in a sleeve defined therefor along a perimeter edge region of the sheet.

- 2 -

The elongate pole of the flag of the invention may be of any suitable material, the pole typically being a substantially rigid pole formed of a metal material, e.g. aluminium, a carbon fibre reinforced material, or the like. The pole may be solid or tubular and may permit support thereof in an upright configuration with respect to a ground surface to provide for display of the display sheet. This upright support of the pole clearly can be provided for in many different configurations and it is particularly also envisaged that the pole can be supported in a configuration in which it can rotate about its own axis.

According to one particular embodiment of the invention, one sheet engagement formation of the two sheet engagement formations is fixedly located along the length of the pole and the second sheet engagement formation is displaceably located along the length thereof. As such, the sheet engagement formation that is fixedly located along the length of the pole may be the operative top formation and include an end cap that fits on the operative top end of the pole. Also, the sheet engagement formation that is displaceably located along the length of the pole may include a sleeve segment that is slidably located on the pole and securing means releasably securing the sleeve segment in a required location along the length of the pole.

According to a further particular embodiment of the invention, both the sheet engagement formations are displaceably located along the length of the pole. As such, each sheet engagement formation may include a sleeve segment slidably located on the pole and securing means releasably securing the segment in a required location along the length of the pole.

The elongate element of the said one sheet engagement formation either may be substantially rigid or resiliently flexible. Where this element is resiliently flexible, the element may serve to enhance the tensioning function of the engagement formations on the display sheet. Also for an elongate element that is resiliently flexible, the operative longitudinal profile of the elongate element may be determined by the perimeter edge

profile of the display sheet along which the seam is defined and in which the element is operatively located.

5 According to still a further particular embodiment of the invention, both the sheet engagement formations may include an elongate element and, as such, both the sheet engagement formations may be engaged with the display sheet by the location of the elongate elements in seams defined therefor along perimeter edge regions of the sheet.

10 Also for this latter particular embodiment of the invention, both the elongate elements may be substantially rigid, one elongate element may be substantially rigid and the other elongate element may be resiliently flexible, or both the elongate elements may be resiliently flexible. Once again, in relation to any element that is resiliently flexible, the resilient flexibility of the element may serve to enhance the tensioning function of the engagement formations on the display sheet and the operative longitudinal profile of the
15 resiliently flexible element may be determined by the perimeter edge profile of the display sheet along which the seam is defined in which the element is operatively located.

20 It will be appreciated that for each sheet engagement formation that includes an elongate element, the elongate element may be formed of any suitable material. Where rigid, the element may be formed of a suitable metal material, whereas where resiliently flexible, the element may be formed of a carbon fibre reinforced material, or the like. Also, where a sheet engagement formation is displaceable and includes a sleeve segment, the sleeve segment may be formed of any suitable material, whereas the
25 securing means associated therewith may be a suitable securing screw, or the like.

It is envisaged also that in relation to each sheet engagement formation that includes an elongate element, that the angular configuration between the elongate element, in its inoperative configuration, and the elongate pole may be rendered adjustable by any

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suitable adjustment mechanism. The configuration of such a mechanism clearly is greatly variable.

Further according to the invention, the display sheet of the flag may include at least two material layers that are suitably engaged with one another. Still further, the display sheet may define a seam along a perimeter edge region thereof within which the pole is operatively located.

It is still further envisaged that the flag of the invention may include at least one additional display sheet and, as such, the sheet engagement formations may provide for each display sheet to be held in a tensioned mode between them.

The or each display sheet of the flag of the invention again may be of any suitable material and, typically, is of a fabric sheet material, or the like. It will be appreciated that within the parameters above defined, the perimeter profile of the display sheet of the flag is greatly variable in order to provide for different configuration flags. Seams defined along perimeter edge regions of display sheets may be formed in any suitable manner and particularly may be formed by stitching.

Insofar as the overall configuration of the flag of the invention is thus greatly variable, the invention extends also to all such variations of a flag which still incorporate the essential principles of the flag of the present invention.

Further features of the flag of the invention are described hereafter with reference to embodiments of flags that are illustrated in the accompanying diagrammatic drawings. In the drawings:

Figure 1 illustrates the pole and the sheet engagement formation configuration of a first embodiment of a flag, in accordance with the invention;

Figure 2 shows an elevational view of the flag of Figure 1, in its operative configuration;

Figure 3 shows the pole and sheet engagement formation configuration of a second embodiment of a flag, in accordance with the invention;

Figure 4 shows an elevational view of the flag of Figure 3, in its operative configuration;

Figure 5 shows an elevational view of a third embodiment of a flag, in accordance with the invention; and

Figure 6 shows an elevational view of a fourth embodiment of a flag, in accordance with the invention.

15

Referring initially to Figures 1 and 2 of the drawings, a first embodiment of a flag, in accordance with the invention, is designated generally by the reference numeral 10. The flag includes an elongate pole 12, that is formed typically of a carbon fibre reinforced material, aluminium, or the like, the operative bottom end of the pole (not shown) permitting support of the pole in an upright configuration with respect to a ground surface.

20

The pole 12 has a first sheet engagement formation 14 located thereon at the operative top end thereof and a second sheet engagement formation 16 located thereon at an intermediate location along the length thereof.

25

The sheet engagement formation 14 particularly includes an end cap 18 that fits slidably onto the top end of the pole 12 for its location, the end cap having an elongate element 20 secured thereto and projecting therefrom as shown. The sheet engagement formation 16 particularly includes a sleeve segment 22 that is slidably located on the

30

- 6 -

pole, the position of the segment being releasably securable by operation of a securing screw 24. The sleeve segment also has an elongate element 26 secured thereto and projecting therefrom as shown.

5 The flag 10 includes also a display sheet 28 that is substantially rectangular in shape and that defines seams 30 along the operative top and bottom edges thereof and along one of the side edges thereof, as illustrated. The seam 30.1 particularly provides for the location of the elongate element 20 therein, whereas the seam 30.2 provides for the location of the elongate element 26 therein. The seam 30.3 provides for the location of
10 the pole 12 therein and with the pole and the elongate elements located within their seams, the flag configuration as shown in Figure 2 is provided for. It will be understood in this regard that the sheet engagement formations, 14 and 16, serve to hold the display sheet in its tensioned display configuration with respect to the pole, the elongate elements ensuring that the display sheet is held taught by the secure location of the
15 sleeve segment 22 of the sheet engagement formation 16 on the pole 12 in a suitable position.

The elongate elements, 20 and 26, projecting respectively from the end cap 18 and the sleeve segment 22, in one embodiment of the flag 10, are rigid elements, in which case
20 the tensioned configuration of the display sheet is provided merely by the suitable positioning of the sleeve segment 22 of the sheet engagement formation 16 on the pole 12. A second embodiment of the flag 10 provides for the elongate elements, 20 and 26, to be resiliently flexible elements and in this configuration the angular configuration of these elements with respect to the pole, without the display sheet located thereon, may
25 be as shown in Figure 1. With the display sheet 28 located on these elements, they will be disposed at an angle of substantially 90° with respect to the pole, the inherent resilience of the elements thus serving to enhance the tensioned display configuration of the display sheet 28 on the elements.

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Both the end cap 18 and the sleeve segment 22 may be formed of any suitable material which will permit the elongate elements, 20 and 26 respectively, to be secured thereto, it being envisaged that the display sheet 28, and particularly the seams provided along the edge regions thereof, will be configured to permit its location on the pole and the elongate elements in a relatively quick and time efficient manner. It is envisaged that this location process will be finalized by tensioning of the display sheet through operatively downward displacement of the sleeve segment 22 on the pole and its secure location on the pole with the aid of the securing screw 24.

Referring now to Figures 3 and 4 of the drawings, a second embodiment of a flag, in accordance with the invention, is designated generally by the reference numeral 30. The flag again includes a pole 32, which is essentially the equivalent of the pole 12 of the flag 10 of Figure 1, as well as a first sheet engagement formation 34 and a second sheet engagement formation 36. The first sheet engagement formation 34 again includes an end cap 38 located on the end of the pole 12 and to which an elongate element 40 is secured in the configuration as shown. The second sheet engagement formation 36 again includes a sleeve segment 42 that is slidably located on the pole 32 and that can be releasably secured in position by a securing screw 44. The sleeve segment 42 has an elongate element 46 secured thereto and projecting therefrom in the configuration as shown. As is apparent from Figure 3, the elongate elements, 40 and 46, in the inoperative configuration of the flag 30, are disposed along a line substantially parallel to the longitudinal axis of the pole 32. For this particular embodiment of the invention, both the elongate elements, 40 and 46, are resiliently flexible elements, typically formed of a carbon fibre reinforced material.

The flag 30 further has a display sheet 48 on which display matter (not shown) is applied, the display sheet, in the operative configuration of the flag 30, defining curved end regions with seams 50.1 and 50.2, for receiving, respectively, the elongate element 40 and the elongate element 46. A further seam 50.3 is defined along one side edge of the display sheet 48, for receiving the pole 32. The opposite side edge 52 of the display

sheet is a straight edge that, in the operative configuration of the display sheet 48 as shown, extends between the free ends of the elongate elements, 40 and 46 respectively, in their operative configuration.

5 It will be appreciated that the resilient flexibility of the elongate elements, 40 and 46, is such that they can adopt the perimeter profile of the display sheet 48 in the curved regions thereof by their location within the seams provided therefor and that in this configuration the inherent resilience of these elements will ensure that the display sheet is held taught between them, once the location of the sleeve segment 42 with respect to
10 the pole is secured. It will be further understood that, for the remainder, the features of the flag 30 are equivalent to that of the flag 10 and in this regard it will be understood also that flags of many different configurations can be provided that still incorporate the principles of the flag of the invention. Clearly, the configuration of the flag 30 as shown also can be provided for by pre-profiled elongate elements instead of flexible elements,
15 in which case the tensioned configuration of the flag will be provided for only by the suitable positioning of the second sleeve engagement formation 36 with respect to the pole 32.

Referring now to Figure 5 of the drawings, a third embodiment of a flag, in accordance
20 with the invention, is designated generally by the reference numeral 60. The flag 60 again includes an elongate pole 62, the top end of the pole, as is apparent from the description that follows, serving as a first sheet engagement formation as herein envisaged. The flag includes also a second sheet engagement formation 64 which is formed of a sleeve segment 66 slidably located on the pole 62 and being releasably
25 securable to the pole by a securing screw 68. The sleeve segment 66 has an elongate element 70 secured thereto and projecting therefrom, the element 70 either being rigid or flexible.

For this configuration flag, the display sheet 72 (only shown in dotted lines) is a
30 triangular sheet that defines a first seam 74, within which the elongate element 70 is

located, and a second seam 76, within which the pole 62 is located. With the top end of the seam blocked, it will be understood that the tensioned configuration of the display sheet is provided for by the suitable positioning of the sheet engagement formation 64 on the pole 62.

5

It will again be appreciated that within the parameters of this flag 60, many different configuration flags can be provided for which can be supported with respect to a ground surface in many different configurations.

10 The particular flag 60 can be located with respect to a ground surface via a spike formation 78 with respect to which the pole 62 is rotatably held, thus permitting rotation of the flag 60 about the axis of its pole 62 when disposed in its operative configuration, particularly by wind, or the like, acting thereon.

15 Referring now to Figure 6 of the drawings, a fourth embodiment of a flag, in accordance with the invention, is designated generally by the reference numeral 80. The flag 80 again includes an elongate pole 82, a first sheet engagement formation 84 and a second sheet engagement formation 86. The first sheet engagement formation 84 includes an end cap 88 located on the operative top end of the pole 82, whereas the
20 second sheet engagement formation 86 includes a sleeve segment 90 slidably located on the pole 82 and being releasably securable in a required position by means of a securing screw 92. For this particular embodiment flag, the end cap 88 has two elongate elements, 94 and 96 respectively, secured thereto and projecting therefrom as shown, the elongate elements 94 and 96 again either being rigid or resiliently flexible elements,
25 fulfilling the function of the elongate elements earlier described.

The flag 80 particularly includes two display sheets, 98 and 100 respectively, (only shown in dotted lines), the display sheets again comprising triangular sheets but in this case being orientated in an inverted configuration when compared with the configuration
30 of the display sheet 72 of the flag 60. One end of the respective display sheets, 98 and

100, clearly are located on the elongate elements, 94 and 96, whereas the opposite end of the respective display sheets are engaged, via suitable hook formations 102, with respect to the sleeve segment 90. The positioning of the sleeve segment again will provide for effective tensioning of the display sheets.

5

It will be apparent from the various embodiments of flags, in accordance with the invention, that are hereinabove described, that still many further embodiment flags that incorporate the principles of the present invention, can be envisaged. The invention clearly extends also to such further possible embodiments. Essentially, flags, in accordance with the invention, provide sheet engagement formations whereby the display sheets of the flags are held in a tensioned mode with respect to a support pole, with tensioning of the display sheets of the flags being provided for by suitable positioning of the sheet engagement formations with respect to one another. In relation to sheet engagement formations that include elongate elements that are resiliently flexible, the inherent flexibility of these elements also serve to tension the display sheets.

The display sheets of the flags as hereinabove described also may include two material layers that are stitched or otherwise secured together and that together define suitable seams for location of the display sheets. Each material layer may thus itself have printed matter applied thereto, possibly different matter.

It is still further envisaged that a flag, in accordance with the invention, may have more than two display sheets that are held in position by suitable sheet engagement formations.

CLAIMS

1. A flag, which includes

5 an elongate pole;

two sheet engagement formations of which at least one engagement formation includes an elongate element and which are operatively located in an adjustable spaced apart configuration along the length of the pole; and

10

a display sheet that is operatively held in a tensioned mode between the two sheet engagement formations by being engaged with the sheet engagement formations and by the sheet engagement formations being located in a suitable spaced apart configuration, the elongate element of the said at least one sheet engagement formation, in the operative configuration of the flag, extending away from the pole and being engaged with the display sheet by the location thereof in a sleeve defined therefor along a perimeter edge region of the sheet.

15

2. A flag as claimed in Claim 1, in which one sheet engagement formation is fixedly located along the length of the pole and the second sheet engagement formation is displaceably located along the length of the pole.

20

3. A flag as claimed in Claim 2, in which the sheet engagement formation that is fixedly located along the length of the pole is the operative top formation and includes an end cap that fits on the operative top end of the pole.

25

4. A flag as claimed in Claim 2 or Claim 3, in which the sheet engagement formation that is displaceably located along the length of the pole includes a sleeve segment that is slidably located on the pole and securing means

releasably securing the sleeve segment in a required location along the length of the pole.

5. A flag as claimed in Claim 1, in which both the sheet engagement formations are
5 displaceably located along the length of the pole.

6. A flag as claimed in Claim 5; in which each sheet engagement formation includes
a sleeve segment slidably located on the pole and securing means releasably
securing the segment in a required location along the length of the pole.

7. A flag as claimed in any one of the preceding claims, in which the elongate
element of the said one sheet engagement formation is substantially rigid.

8. A flag as claimed in any one of Claims 1 to 6, in which the elongate element of
15 the said one sheet engagement formation is substantially flexible.

9. A flag as claimed in Claim 8, in which the resilient flexibility of the elongate
element serves to enhance the tensioning function of the engagement
formations on the display sheet.

10. A flag as claimed in Claim 8 or Claim 9, in which the operative longitudinal profile
of the elongate element is determined by the perimeter edge profile of the
display sheet along which the seam is defined in which the element is operatively
located

11. A flag as claimed in any one of Claims 1 to 6, in which both the sheet
engagement formations include an elongate element and in which the sheet
engagement formations are engaged with the display sheet by the location of the
elongate elements in seams defined therefor along perimeter edge regions of the
30 sheet.

12. A flag as claimed in Claim 11, in which both the elongate elements of the sheet engagement formations are substantially rigid.
- 5 13. A flag as claimed in Claim 11, in which one elongate element is substantially rigid and the other elongate element is resiliently flexible.
14. A flag as claimed in Claim 11, in which both the elongate elements of the sheet engagement formations are resiliently flexible.
- 10 15. A flag as claimed in Claim 14, in which the resilient flexibility of the elongate elements serve to enhance the tensioning function of the engagement formations on the display sheet.
- 15 16. A flag as claimed in Claim 15, in which the respective operative longitudinal profiles of the elongate elements are determined by the perimeter edge profiles of the display sheet along which the seams are defined in which the respective elements are operatively located.
- 20 17. A flag as claimed in any one of the preceding claims, in which the display sheet includes at least two material layers suitably engaged with one another.
- 25 18. A flag as claimed in any one of the preceding claims, in which the display sheet defines a seam along a perimeter edge region thereof within which the pole is operatively located.
19. A flag as claimed in any one of the preceding claims, which includes at least one additional display sheet and in which the sheet engagement formations provide for each display sheet to be held in a tensioned mode between them.

20. A flag substantially as described in the specification with reference to and as illustrated in the accompanying drawings.

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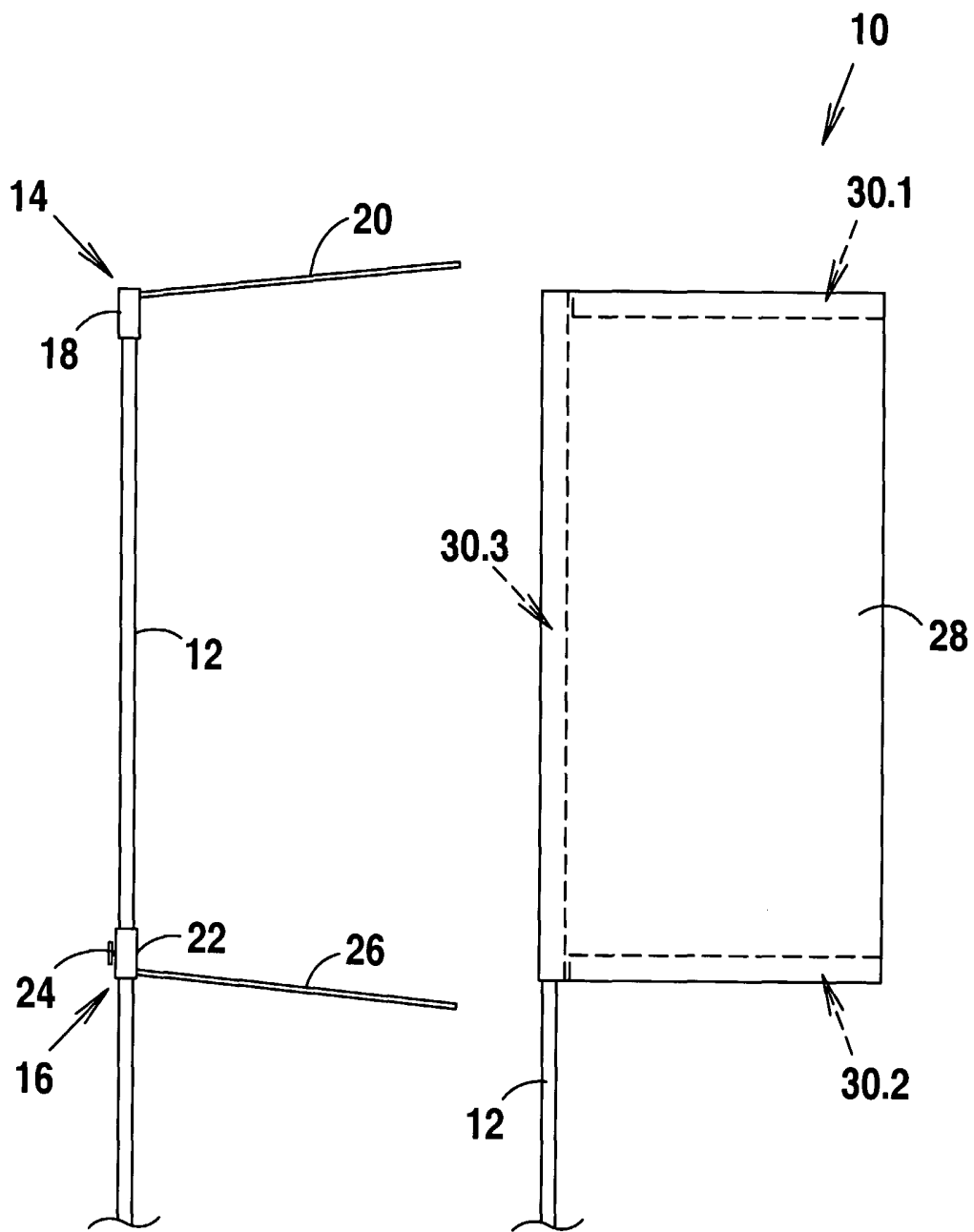


FIG 1

FIG 2

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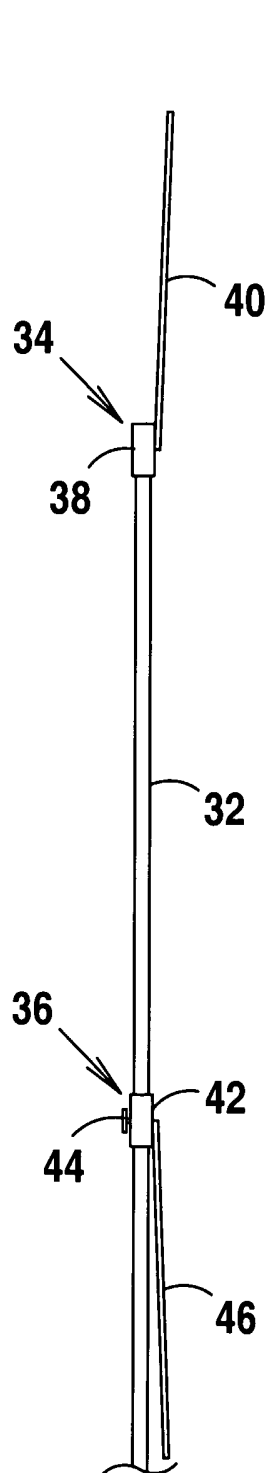


FIG 3

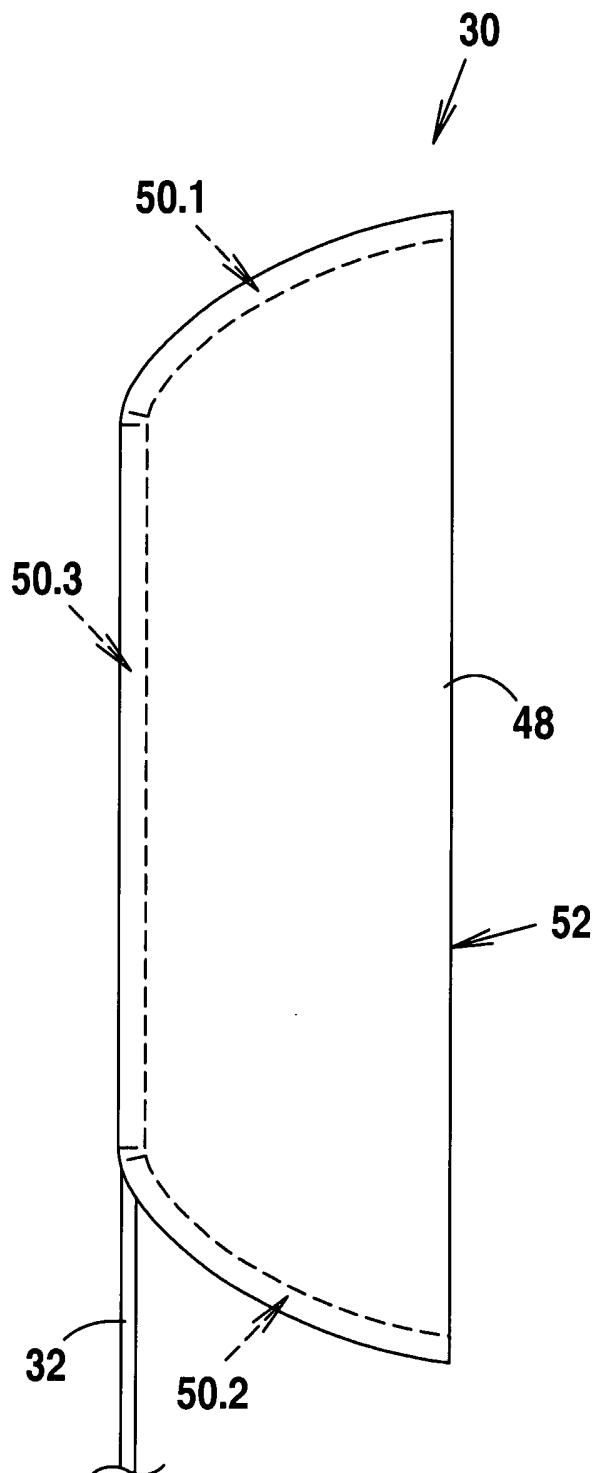


FIG 4

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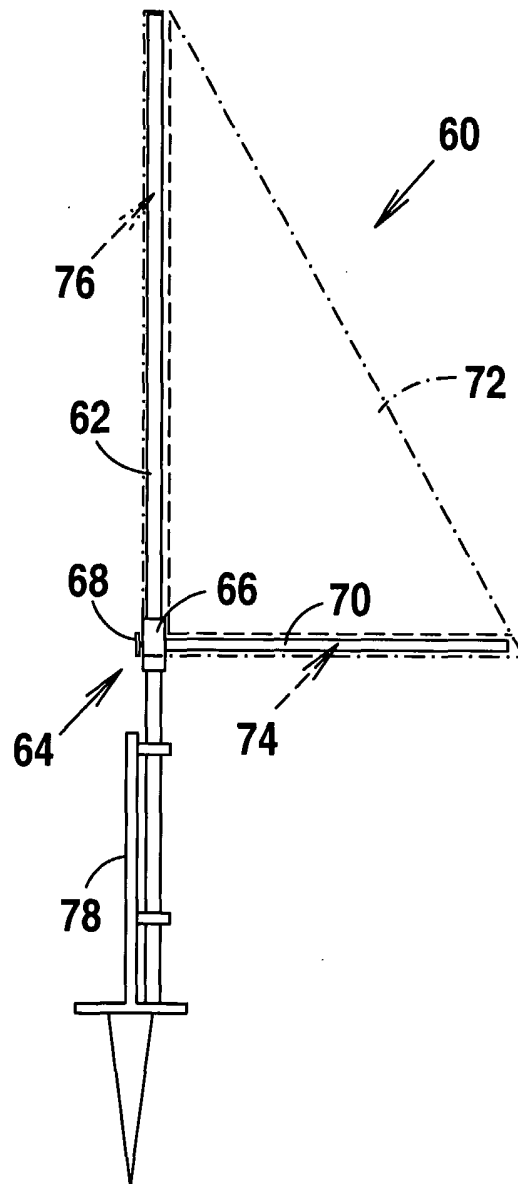


FIG 5

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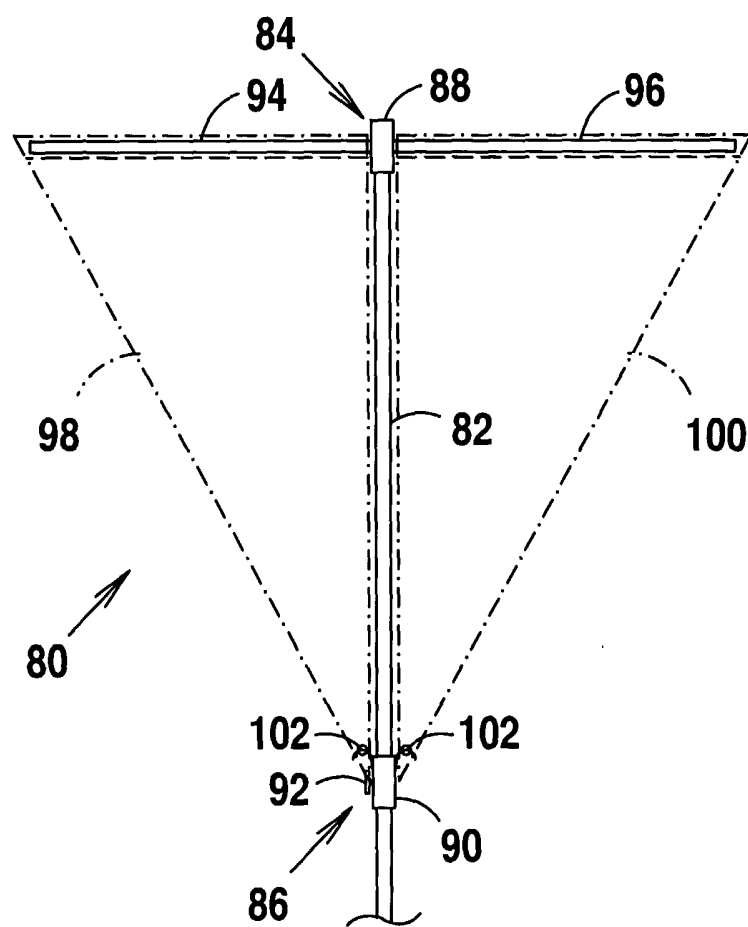


FIG 6

INTERNATIONAL SEARCH REPORT

IB2005/002439

A. CLASSIFICATION OF SUBJECT MATTER

G09F17/00 G09F7/20

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)

G09F

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 practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	paragraph '0045! figures 16a, 16b	8-10, 13-16
X	US 5 255 627 A (WILLIAMS ET AL) 26 October 1993 (1993-10-26) column 3, line 40 - line 47 column 3, line 63 - column 4, line 8 column 4, line 65 - column 5, line 30	1-4, 7, 17, 20
Y	figures 1-9	8-10
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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