



(11) **EP 2 267 687 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
29.12.2010 Bulletin 2010/52

(51) Int Cl.:
G09F 7/20 (2006.01) **G09F 15/00 (2006.01)**
G09F 17/00 (2006.01) **G09F 7/18 (2006.01)**

(21) Application number: **10167390.3**

(22) Date of filing: **25.06.2010**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR
Designated Extension States:
BA ME RS

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(30) Priority: **25.06.2009 DK 200900786**

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(54) **Sign mount**

(57) A sign mount comprising a mount member with means for mounting the sign mount to a surface such as a wall or a pole, an elongate member having a first end, a second end and an first elongate axis, two elongate adjustment members each having a first end and a second end and second elongate axes, an elongate sign holder (7) having a first end, a second end and a third elongate axis, wherein the elongate member is attached to and extending from said mount member in a direction along the first elongate axis, the adjustment members are attached to and extending from said elongate member in direction along the second elongate axes, at first attachment positions and along said first elongate axis on said elongate member, the first position of at least one of the adjustment members may be shifted along the first elongate axis of said elongate member, the sign holder (7) is extending from the two adjustment members in a direction along the third elongate axis and attached to the two adjustment members at second attachment positions and along said second elongate axes on said elongate adjustment member and the second position of the sign holder (7) may be shifted along axes of said adjustment member.

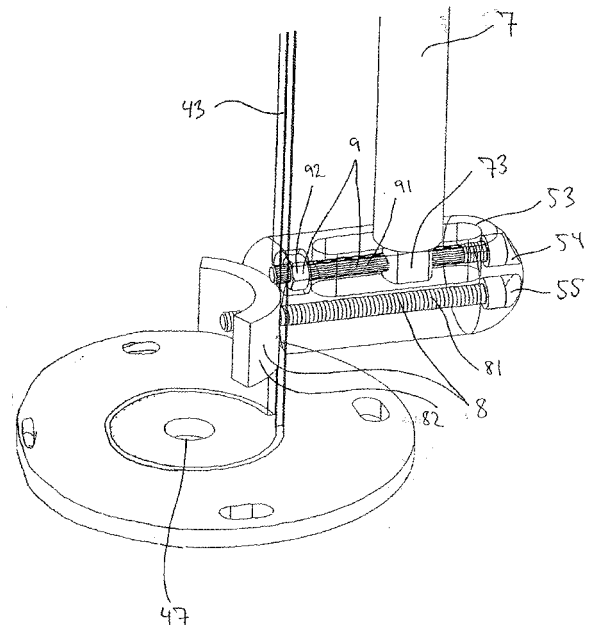


FIG. 2

Description

Field of the invention

[0001] The present invention relates to a sign mount of the type that may be mounted on any type of surface, flat or curved. It is primarily intended to be used as wall mounts or pole mounts or the like.

Background of the invention

[0002] Signs such as banners, flags and objects of similar type are widely used to convey information and provide an aesthetic appeal. It is well known that signs such as banners, flags, shop signs, light signs and other similar types of signs may be suspended by poles either standing on the ground, mounted on a wall, building or other surface.

[0003] A method well known in the art for attaching banners, flags, shop signs, light signs and other similar types of signs is a welded gallows-type sign mount. The sign mount is typically produced one by one, by a craftsman welding a set of bars together in the desired dimensions. Such constructions are expensive, heavy, non-versatile and without any immediate possibilities of alterations.

[0004] Hence an improved sign mount would be advantageous, and in particular a more versatile, cheap and adjustable sign mount would be advantageous.

Object of the invention

[0005] It is an object of the invention to provide a sign mount that overcomes the deficiencies of prior art sign mounts.

[0006] It is a further object of the invention to provide a sign mount that allows a precise leveling of a mounted sign.

[0007] It is a further object of the invention to provide a sign mount that allows flexible mounting of signs, such as banners, posts etc.

[0008] It is a further object of the present invention to provide an alternative to the prior art, which provide a strong, light, cheap, easy-to-mount construction, which may easily be adjusted for different purposes.

[0009] It is a further object of the present invention to provide a sign mount where all installation and adjustment may be done by standard tools, such as hacksaws, screwdrivers, wrenches and spanners

[0010] In particular, it may be seen as an object of the present invention to provide a sign mount that solves the above mentioned problems of the prior art.

Summary of the invention

[0011] Thus, the above described object and several other objects are intended to be obtained in a first aspect of the invention by providing a sign mount comprising

- a mount member with means for mounting the sign mount to a surface such as a wall or a pole;
 - an elongate member having a first end, a second end and a first elongate axis;
 - two elongate adjustment members each having a first end and a second end and second elongate axes;
 - an elongate sign holder having a first end, a second end and a third elongate axis;
- wherein
- the elongate member is attached to and extending from said mount member in a direction along the first elongate axis;
 - the adjustment members are attached to and extending from said elongate member in direction along the second elongate axes, at first positions along said first elongate axis on said elongate member;
 - the first position of at least one of the adjustment members may be shifted along the first elongate axis of said elongate member;
 - the sign holder is extending from the two adjustment members in a direction along the third elongate axis and attached to the two adjustment members at second positions along said second elongate axes on said elongate adjustment member, and
 - the second position of the sign holder may be shifted along axes of said adjustment member.

[0012] Thereby a sign mount that is fully adjustable with respect to the surface, where the sign mount is mounted, is achieved. Further, a sign mount is achieved that is adjustable with respect to the size of the sign and furthermore with respect to the position of the sign with respect to the surroundings, and at least the pole or wall to which the sign is mounted. The invention is particularly, but not exclusively, advantageous for obtaining a level sign mounted on rough and uneven surfaces.

[0013] The invention is also particularly advantageous since all installation and adjustment may be done by standard tools, such as hacksaws, screwdrivers, wrenches and spanners

[0014] In all embodiments of the invention at least one of the members chosen from the group consisting of the mount member, the elongate member, the adjustment members and the sign holder are made from lightweight metal such as aluminum or an alloy comprising aluminum.

[0015] In one embodiment of the invention the elongate member may be a bar having a hollow profile.

[0016] The elongate member may comprise a slit opening along the first axis; said adjustment members being slidably arranged in said slit.

[0017] In an embodiment of the invention the elongate member may be connectable to the mount member by releasable connection means. Alternatively the elongate member and the mount member may be fixedly connected or integrally formed.

[0018] In an embodiment of the invention at least one

of the adjustment members may be a bar having a hollow profile.

[0019] At least one of the adjustment members may comprise a slit opening along axes, said sign holder being slidably arranged in said slit.

[0020] In one embodiment of the invention the adjustment members are connectable to the elongate member by releasable connection means. The releasable connection means may be a bolt and a nut.

[0021] In an embodiment of the invention the sign holder may be connectable to the adjustment members by adjustable connection means. The adjustable connection means may be a bolt and a locknut.

[0022] In an embodiment of the invention the sign holder may be connectable to the adjustment members by attachment means.

[0023] In an embodiment of the invention a sign mount system is provided, comprising a pair of sign mounts and a sign, such as a banner, flag, shop sign, light sign or other similar type of sign, which may be suspended between said pair of sign mounts.

[0024] These and other aspects of the invention will be apparent from and elucidated with reference to the embodiments described hereinafter

[0025] The term sign mount is used throughout the application. Sign mounts are sometimes also referred to as sign holder, banner mount, banner holder, sign support, flag mount or flag holder.

[0026] Throughout this document the terms "comprising" or "comprises" do not exclude other possible elements or steps. Also, the mentioning of references such as "a" or "an" etc. should not be construed as excluding a plurality.

Brief description of the drawings

[0027] The sign mount according to the invention will now be described in more detail with regard to the accompanying figures. The figures show one way of implementing the present invention and is not to be construed as being limiting to other possible embodiments falling within the scope of the attached claim set.

- Figure 1, in a perspective view, shows an embodiment of a sign mount according to the invention;
- Figure 2, in a transparent perspective view, shows details of the embodiment of the sign mount shown in Fig. 1 in the vicinity of an adjustment member;
- Figure 3, in perspective view, shows an embodiment of a sign mount according to the invention, where a banner is mounted on the sign holder;
- Figure 4, in a perspective view, shows an embodiment of a sign mount according to the invention, where a banner is stretched between two sign mounts;
- Figure 5, in a perspective view, shows an embodiment of a sign mount according to the invention, where two banners are held on separate sign holders;

ers; and

- Figure 6 (A-C) shows an elongate member of a sign mount according to another embodiment of the invention, in top view a front view and a perspective view respectively.

Embodiments of the invention

[0028] The following description refers to preferred embodiments of the present invention. To facilitate an understanding of the present invention, reference is made to the accompanying drawings which illustrate preferred embodiments of the present invention. For ease of communication, similar components between the drawings are identified by the same reference numerals.

[0029] Figure 1 shows a sign mount 1 according to an embodiment of the invention. The sign mount 1 comprises a mount member 2 with means 21 for mounting the sign mount 1 to a surface 3 such as a wall or a pole. The mount member 2 might be shaped in any particular geometry to match the shape of the surface 3 such as a flat geometry for use on flat surfaces or curved geometry for use on curved surfaces, e.g. poles or bars or the like. The mount member is, in one embodiment and as shown in the figures, a flat circular plate for mounting on a flat surface.

[0030] In other embodiments (not shown) the mount member 2 may also take an "artistic" shape in order to improve the aesthetic impression of the sign mount 1. The mount member 2 is attachable to the surface 3 by use of the mounting means 21. Such mounting means 21 may comprise holes 21 in the mount member 2 to facilitate attachment to the surface by bolts or the like. Furthermore, the holes 21 may in various embodiments take on a shape different from circular in order to facilitate adjustability when mounting the mount member 2 to the surface 3, e.g. by elongating the holes 21 in one or more directions. In one embodiment the holes may be elongate along a circumference of a circular mount member 2, thus facilitating rotation of the mount member 2 with respect to a first elongate axis A of an elongate member 4 connected to or connectable to said mount member 2. In another embodiment, horizontally or vertically arranged elongate holes may facilitate horizontal or vertical adjustments, respectively, of the sign mount.

[0031] The surface 3 may be a wall, window or any other type of vertical surface, or a roof, loft, floor or any other type of level surface, or an inclined roof, staircase or other type of inclined surface. It may be provided on a building, poles, studs on showcase or the like.

[0032] The elongate member 4 is, in one embodiment and as shown in the figures, a bar-shaped elongate structure extending from the mount member 2. The elongate member 4 has first end 41 and a second end 42, a first elongate axis A extending along the elongate member 4 and through the first and second ends 41, 42.

[0033] The two elongate adjustment members 5, 6 are, in one embodiment and as shown in the figures, a bar-

shaped elongate structure extending from the elongate member 4. The adjustment members each have a first end 51, 61 and a second end 52, 62 and second elongate axes B, B'.

[0034] The elongate sign holder 7 is, in one embodiment and as shown in the figures, a bar-shaped elongate structure extending between the two adjustment members 5, 6. The sign holder has a first end 71, a second end 72 and a third elongate axis C.

[0035] The adjustment members 5, 6 are, in one embodiment and as shown in the figures, attached to said elongate member 4 by releasable connection means 81, 82. Where the adjustment members 5, 6 may be shifted along the first elongate axis A of said elongate member 4 by sliding in a slit 43 formed along axis A in a sidewall of the elongate member 4.

[0036] The sign holder 7 is, in one embodiment and as shown in the figures, extending from the two adjustment members 5, 6 in a direction along the third elongate axis C. The sign holder 7 is, in one embodiment and as shown in the figures, attached to the two adjustment members 5, 6 in a slit opening 53 formed in each of the adjustment members 5, 6.

[0037] The sign holder 7 is, in one embodiment and as shown in the figures, attached in the slit opening 53 formed in each of the adjustment members 5, 6, to adjustable connection means 91, 92, where the sign holder 7 may be shifted along axes B, B' of said adjustment member 5, 6 by adjusting said adjustable connection means. In one embodiment and as shown in the figures, the adjustable connection means 91, 92 are a bolt 91 and a locknut 92 freely rotatable around the elongate axis of the bolt. In this embodiment of the invention the releasable attachment means 73 may, as shown in the figures, be a bore hole with threads. When the adjustable connection means 91, 92 are rotated in this embodiment, the first attachment positions P, P' of the sign holder 7 may be shifted along the second axis B, B' in the slit opening 53.

[0038] The position of the sign holder 7 may be shifted along the first axis A of said elongate member 4 by adjusting the first attachment positions P, P' of the adjustment members accordingly in order to adjust the distance between the sign 10 and the surface 3.

[0039] In an embodiment the distance between the sign holder and the elongate member 4 may be coarsely defined by choosing a certain length of the adjustment members 5, 6 and finely adjusted by adjusting the second attachment positions Q, Q' of the of the sign holder 7 along the axes B, B' on the adjustment members 5, 6 by using the adjustable connection means 91, 92.

[0040] In an embodiment the position of the sign holder may be adjusted by adjusting the adjustable connection means 91, 92 to shift the attachment positions Q and Q' along the axes B and B' in a suitable manner such as adjusting the sign holder 7 to be level or to follow a plumb-line. The third elongate axis of the sign holder C may therefore in this embodiment of the invention be adjusted

in a manner where A and C are not parallel in order to bring the sign into a desired position such as level in case the elongate member 4 is not level due to an inclination of the surface 3.

[0041] The elongate member 4 may in various embodiments of the invention have a cross-section, which may be circular, rectangular, triangular or any other polygonal or free-formed shape.

[0042] The elongate member 4 may also in various embodiments of the invention be made from a hollow profile or a solid core profile or a solid core profile with some of the core material removed by techniques such as milling or the profile may be hollow but include support ribs inside the hollow structure. In the embodiment shown in the figures, the elongate member 2 is a cylindrical, hollow bar.

[0043] In embodiments where the elongate member 4 is solid or in other ways doesn't facilitate a slit opening 43, the adjustment members 5, 6 can be attached to and shifted along e.g. a rail (not shown) mounted on the elongate member 4 or being fixedly connected to or integrally formed with said elongate member 4, or the elongate member 4 may take the form of a rail (not shown).

[0044] In various other embodiments of the invention the two elongate adjustment members 5, 6 may have a cross-section, which may be circular, rectangular, triangular or any other polygonal or free-formed shape.

[0045] The two elongate adjustment members 5, 6 may, in one embodiment and as shown in the figures, be made from a hollow profile, in embodiments not shown the adjustment members 5, 6 may have a solid core profile, a solid core profile with some of the core material removed by techniques such as milling or the profile may be hollow but include support ribs inside the hollow structure.

[0046] The two elongate adjustment members 5, 6 may, in various embodiments be made from any solid material having the strength to support the sign mounted by the sign mount, such as metal, plastic, wood, ceramic, resin, fiber-reinforced resin, graphite, amorphous material, stone or concrete.

[0047] Furthermore the two elongate adjustment members 5, 6 may, in one embodiment of the invention, comprise guide means such as bore holes guide tubes or guide rings for facilitating the releasable connection means 81, 82 within the structure of the elongate adjustment member 5, 6.

[0048] Also the elongate adjustment members 5, 6 may, in one embodiment and as shown in the figures, comprise bore holes, guide tubes or guide rings for facilitating the adjustable connection means 91, 92 within the structure of the elongate adjustment member 5, 6.

[0049] The elongate adjustment members 5, 6 may comprise a slit opening 53, so that the attachment of sign holder 7 to the elongate adjustment members 5, 6 may be shifted in second attachment positions Q, Q' along the axes B, B' of the elongate adjustment members 5, 6.

[0050] In one embodiment and as shown in the figures the slit 53 is a straight elongate slit formed in the direction of the axes B, B' of the elongate adjustment members 5, 6.

[0051] In an alternative embodiment the adjustment members 5, 6 may be formed with elongate rails (not shown), a sign holder 7 being adjustable in a direction of axis B and B' by suitable connection and adjustment means (not shown).

[0052] In a further embodiment of the invention the sign holder 7 may have a cross-sectional shape perpendicular to the third axis C, which may be circular, rectangular, triangular or any other polygonal or free-formed shape.

[0053] In a further embodiment of the invention the sign holder 7 may be made from a hollow profile, a solid core profile, a solid core profile with some of the core material removed by techniques such as milling or the profile may be hollow but include support ribs inside the hollow structure.

[0054] The sign holder 7 may be made from any solid material having the strength to support the sign mounted by the sign mount, such as metal, plastic, wood, ceramic, resin, fiber-reinforced resin, graphite, amorphous material, stone or concrete.

[0055] Furthermore the sign holder 7 may comprise bore holes, guide tubes, guide rings for facilitating the releasable connection means 73 within the structure. In an embodiment and as shown in the figures the releasable connection means 73 are boreholes through the sign holder 7 perpendicular to the third axis C of the sign holder 7 with threads complementing the threads on the adjustable connection means 91 in embodiments where the adjustable connection means 91 are bolts with threads.

[0056] The releasable connection means 73 may, in one embodiment and as shown in the figures, be a borehole with threads or may in other embodiments of the invention not shown be a spring device attachment, a clickable device attachment, a tongued or grooved joint, a pinhole attachment or pneumatic release means.

[0057] The sign 10 may in various embodiments be attached to the sign holder 7 by use of taps, rings, wrap around, Velcro or glue.

[0058] The sign mount is in an embodiment of the invention designed to support a flag, banner, several banners, light signs, plate signs, 2D figure signs, 3D figure signs or other types of artistic creations.

[0059] The mount member 2 and the elongate member 4 may in embodiments be formed integrally. However in an embodiment of the invention the mount member 2 and elongate member 4 may be connectable by releasable connection means 47. Releasable connection means 47 such as a thread, stub, bolt, spring device attachment, a clickable device attachment, a tongued or grooved joint, a pinhole attachment or pneumatic release means may in embodiments be applied to releasably connect the mount member 2 with the elongate member 4.

[0060] In order to improve the versatility of the sign mount in an embodiment of the invention the members

2, 4, 5, 6, 7 may be made by a series of detachable modules. This allows the user to change the length of the members without destructively being forced to cut the members in the desired lengths. The attachment between modules may be provided by a thread, stub, bolt, spring device attachment, a clickable device attachment, a tongued or grooved joint, a pinhole attachment or pneumatic connection means.

[0061] In an embodiment of the invention all installation and adjustment of the sign mount may be done by standard tools, such as hacksaws, screwdrivers, wrenches and spanners.

[0062] In an embodiment of the invention, and as shown in figure 4 two sign mounts 1 may be used to stretch out the sign, such as a banner. A sign mount 1 is placed in the top and in the bottom for vertical placement of the sign or in either side in case of horizontal placement of the sign. The distance between the two sign mounts 1 may coarsely define the banner width/height whereas the adjustable connection means 91, 92 may finely adjust the position of the sign, and furthermore stretch the sign to keep it flat, and furthermore for the user to straighten the sign over time to compensate for any slack caused by wear and tear of the sign by simply adjusting the adjustable connection means 91, 92 without having to change the attachment of the sign mount 1 to the surface 3 such as holes drilled into a wall.

[0063] In an embodiment of the invention, the elongate member 4 is a hollow profile, which is closed in the end 42 by an endmember 46, such as a plug.

[0064] In another embodiment of the invention, the adjustment members 5, 6 are hollow profiles, which are closed in the ends 52, 62 by endmembers 59, 69, such as plugs.

[0065] In an embodiment of the invention, the elongate member 4 is provided with attachment means 44, e.g. in the form of a ring, for attaching a cable, bar or the like 45 for distributing forces to the surface 3 to which the sign mount (1) is attached corresponding to forces acting on the sign, e.g. gravitation, wind, or mechanical impacts. Thereby the sign mount 1 may be provided with additional support other than what is provided by the mount member.

[0066] Although the present invention has been described in connection with the specified embodiments, it should not be construed as being in any way limited to the presented examples. The scope of the present invention is set out by the accompanying claim set.

[0067] In an embodiment of the invention, the elongate member 4 may be made from any material having the strength to support the sign mounted by the sign mount, such as metal, plastic, wood, ceramic, resin, fiber-reinforced resin, graphite, amorphous material, stone or concrete.

[0068] In an embodiment of the invention, the sign mount 1 is made by a series of detachable modules.

[0069] In an embodiment of the invention, the adjustment members 5, 6 and the elongate member 4 are fix-

edly connected or integrally formed.

[0070] In figure 6 (A-C) an elongate member 4 of a sign mount 1 according to another embodiment of the invention is shown in top view a front view and a perspective view, respectively. The elongate member 4 has first end 41 and a second end 42, a first elongate axis A extending along the elongate member 4 and through the first and second ends 41, 42. The elongate member 4 has a slit 43 formed in a sidewall of the elongate member 4. In this embodiment the slit 43 is not formed in the entire length of the elongate member 4 as in the embodiment shown in Fig. 2. Thereby the elongate member 4 obtains an increased strength especially in the ends 41, 42. In the Fig. 6 embodiment, the slit 43 of the elongate member 4 may be provided with an enlarged opening 43a formed in one end of the slit 43. The opening allows the mounting of adjustment members 5, 6. One or more holes 100 may further be formed through the sidewall of the elongate member, preferably at a position in extension of the slit 43. The hole 100 allows the fixation of an end member 46, e.g. by a pinol/pointed screw.

[0071] The mount member 2 and the elongate member 4 may in as in the above described embodiments, be formed integrally. However in an embodiment of the invention the mount member 2 and elongate member 4 may be connectable by releasable connection means 47. Releasable connection means 47 such as a thread, stub, bolt, spring device attachment, a clickable device attachment, a tongued or grooved joint, a pinhole attachment or pneumatic release means may in embodiments be applied to releasably connect the mount member 2 with the elongate member 4.

[0072] The elongate member 4 may in various embodiments of the invention have a cross-section, which may be circular, rectangular, triangular or any other polygonal or free-formed shape.

[0073] The use of reference signs in the claims with respect to elements indicated in the figures shall also not be construed as limiting the scope of the invention. Furthermore, individual features mentioned in different claims, may possibly be advantageously combined, and the mentioning of these features in different claims does not exclude that a combination of features is not possible and advantageous.

Claims

1. A sign mount (1) comprising

- a mount member (2) with means (21) for mounting the sign mount to a surface (3) such as a wall or a pole;
- an elongate member (4) having a first end (41), a second end (42) and an first elongate axis (A);
- two elongate adjustment members (5, 6) each having a first end (51, 61) and a second end (52, 62) and second elongate axes (B, B');

- an elongate sign holder (7) having a first end (71), a second end (72) and a third elongate axis (C);
wherein

- the elongate member (4) is attached to and extending from said mount member (2) in a direction along the first elongate axis (A);
- the adjustment members (5, 6) are attached to and extending from said elongate member (4) in direction along the second elongate axes (B, B'), at first attachment positions P and P' along said first elongate axis (A) on said elongate member (4);
- the first position (P, P') of at least one of the adjustment members (5, 6) may be shifted along the first elongate axis (A) of said elongate member (4);
- the sign holder (7) is extending from the two adjustment members (5, 6) in a direction along the third elongate axis (C) and attached to the two adjustment members (5, 6) at second attachment positions Q and Q' along said second elongate axes (B, B') on said elongate adjustment member (5, 6), and
- the second position (Q, Q') of the sign holder (7) may be shifted along axes (B, B') of said adjustment member (5, 6)

2. A sign mount (1) according to claim 1, wherein at least one of the members chosen from the group consisting of the mount member (2), the elongate member (4), the adjustment members (5, 6) and the sign holder (7) are made from lightweight metal such as aluminum or an alloy comprising aluminum.

3. A sign mount (1) according to claim 1 or 2, wherein the elongate member (4) is a bar having a hollow profile.

4. A sign mount (1) according to claim 3, wherein the elongate member (4) comprises a slit opening (43) along the first axis (A) said adjustment members (5, 6) being slidably arranged in said slit.

5. A sign mount (1) according to any one of the preceding claims, wherein the elongate member (4) is connectable to the mount member (2) by releasable connection means (47).

6. A sign mount (1) according to any one of claims 1-5, wherein the elongate member (4) and the mount member (2) are fixedly connected or integrally formed.

7. A sign mount (1) according to any one of the preceding claims, wherein at least one of the adjustment members (5, 6) is a bar having a hollow profile.

8. A sign mount (1) according to claim 7, wherein at least one of the adjustment members (5, 6) comprises a slit opening (53) along axes (B, B'), said sign holder (7) being slidably arranged in said slit (53). 5
9. A sign mount (1) according to any one of the preceding claims, wherein the adjustment members (5, 6) are connectable to the elongate member (4) by releasable connection means (81, 82). 10
10. A sign mount (1) according to claim 9, wherein the releasable connection means (91, 92) are a bolt (81) and a nut (82).
11. A sign mount (1) according to any one of the preceding claims, wherein the sign holder (7) is connectable to the adjustment members (5, 6) by adjustable connection means (91, 92). 15
12. A sign mount (1) according to any one of the preceding claims, wherein the adjustable connection means (91, 92) are a bolt (91) and a locknut (92). 20
13. A sign mount (1) according to any one of the preceding claims, wherein the sign holder (7) is connectable to the adjustment members (5, 6) by releasable attachment means (73). 25
14. A sign mount system, comprising a pair of sign mounts (1) according to any of claims 1-13 and a sign (10), such as a banner, flag, shop sign, light sign or other similar type of sign, which may be suspended between said pair of sign mounts. 30

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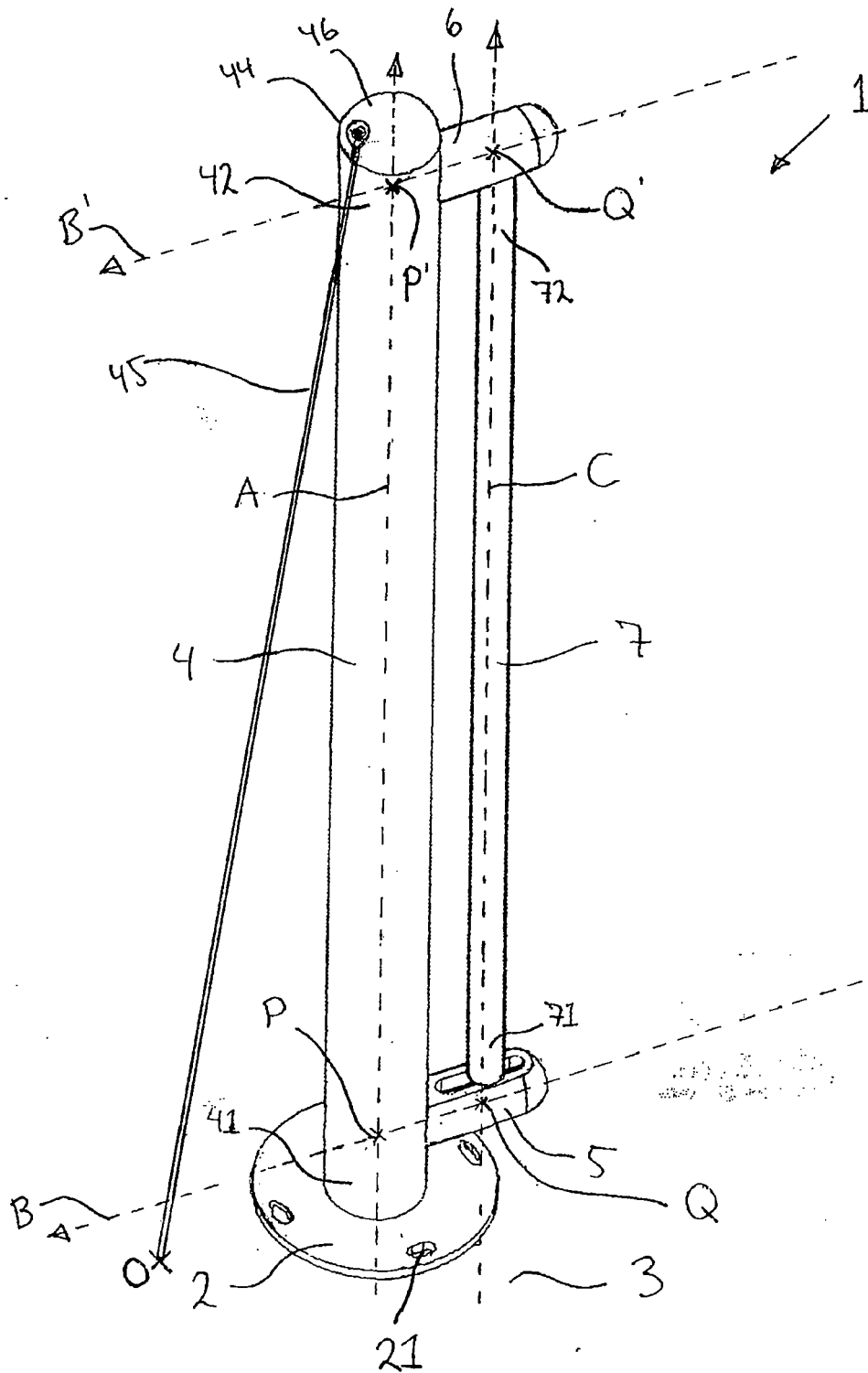


FIG. 1

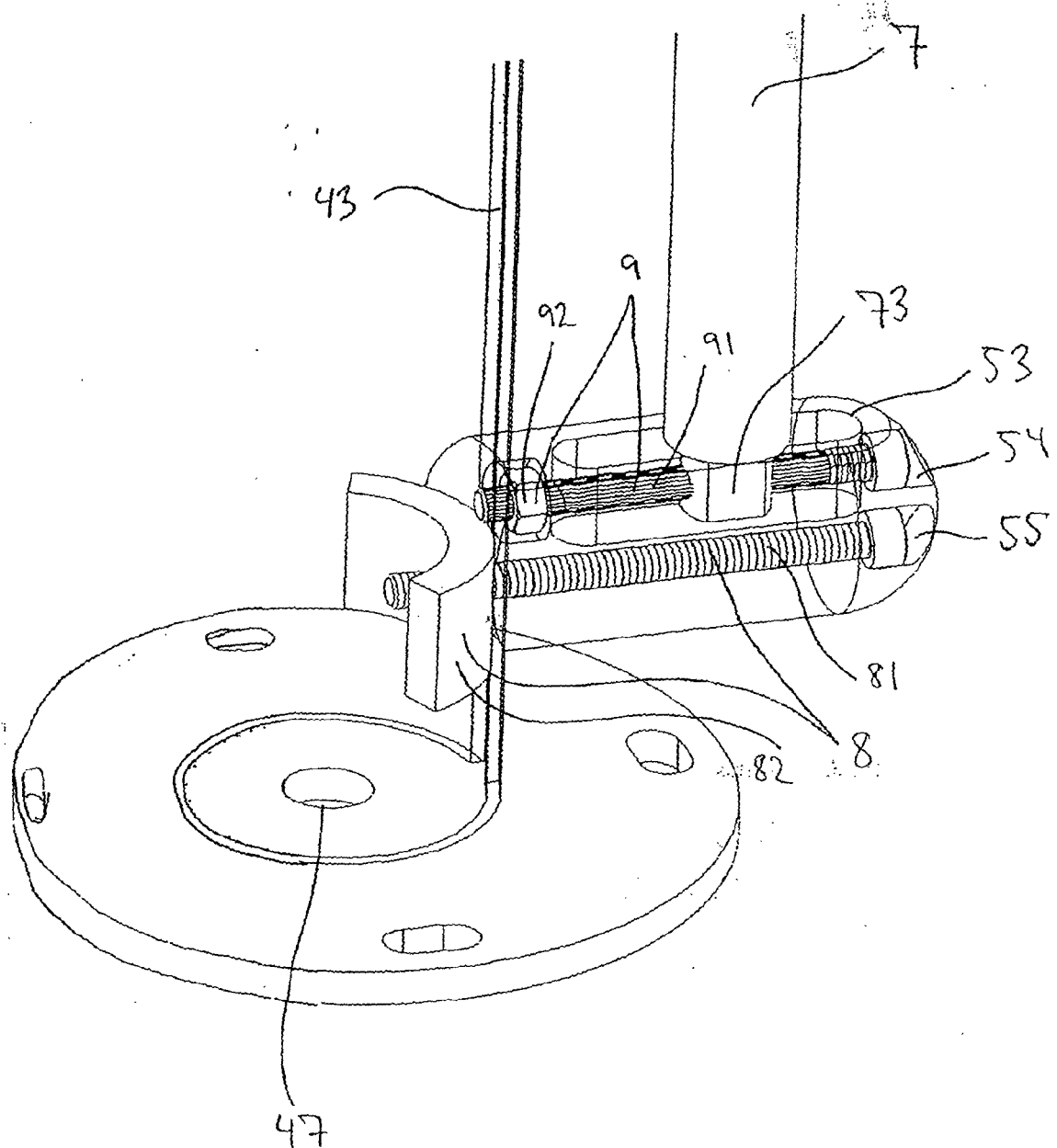


FIG. 2

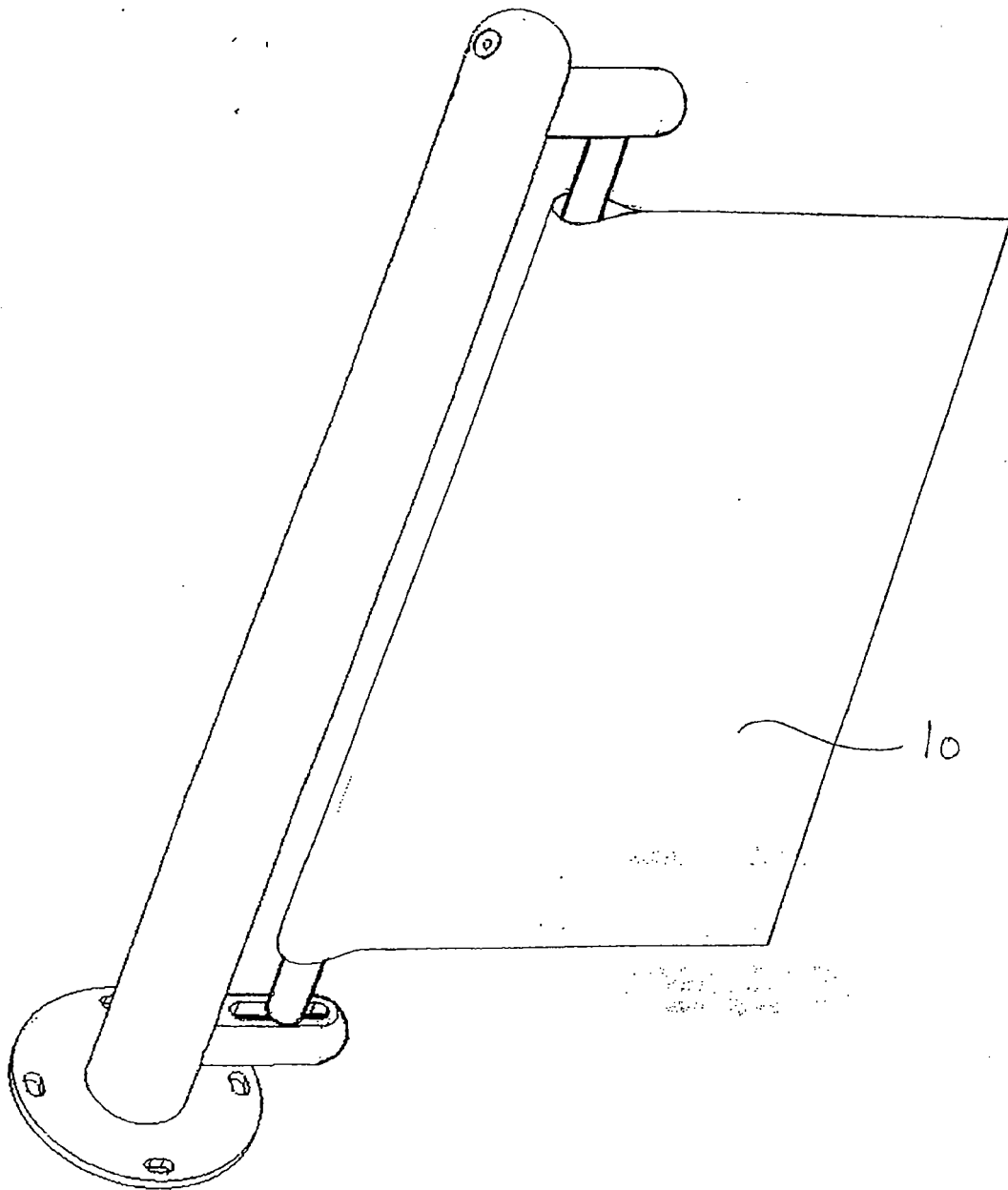


FIG. 3

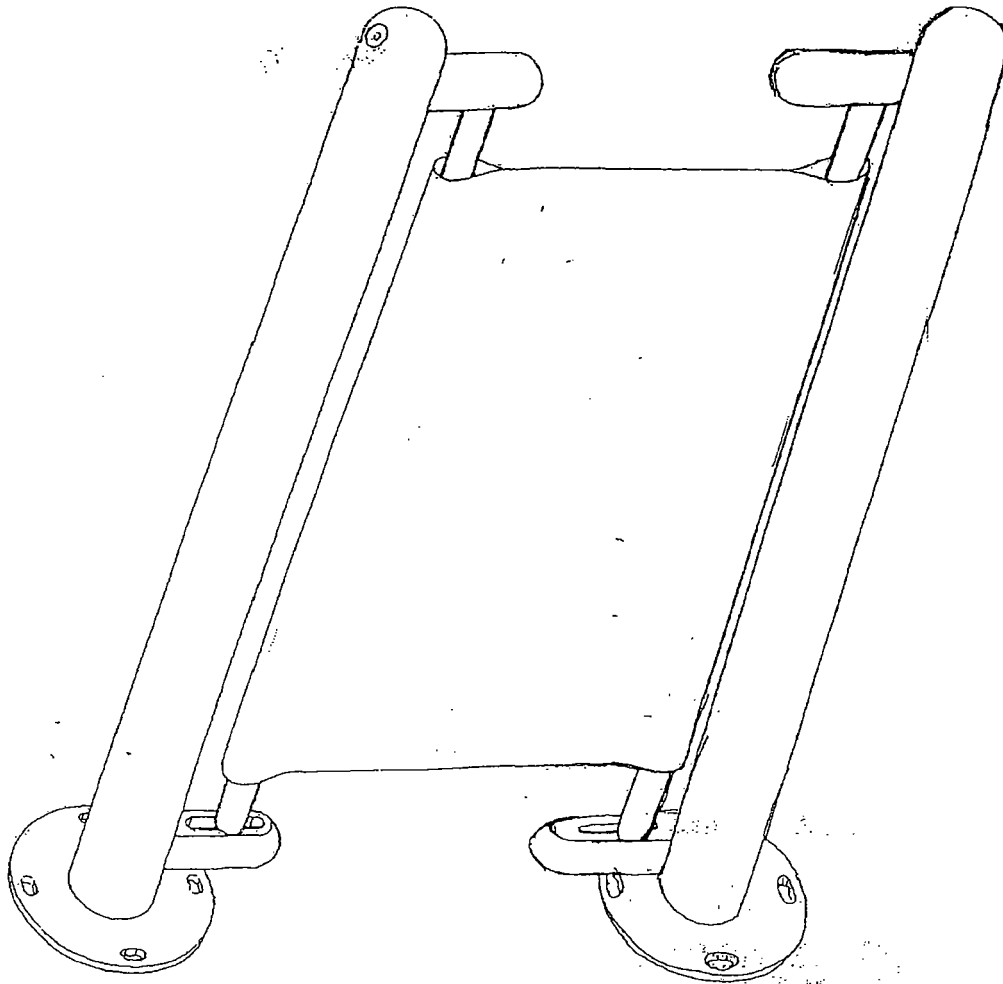


FIG. 4

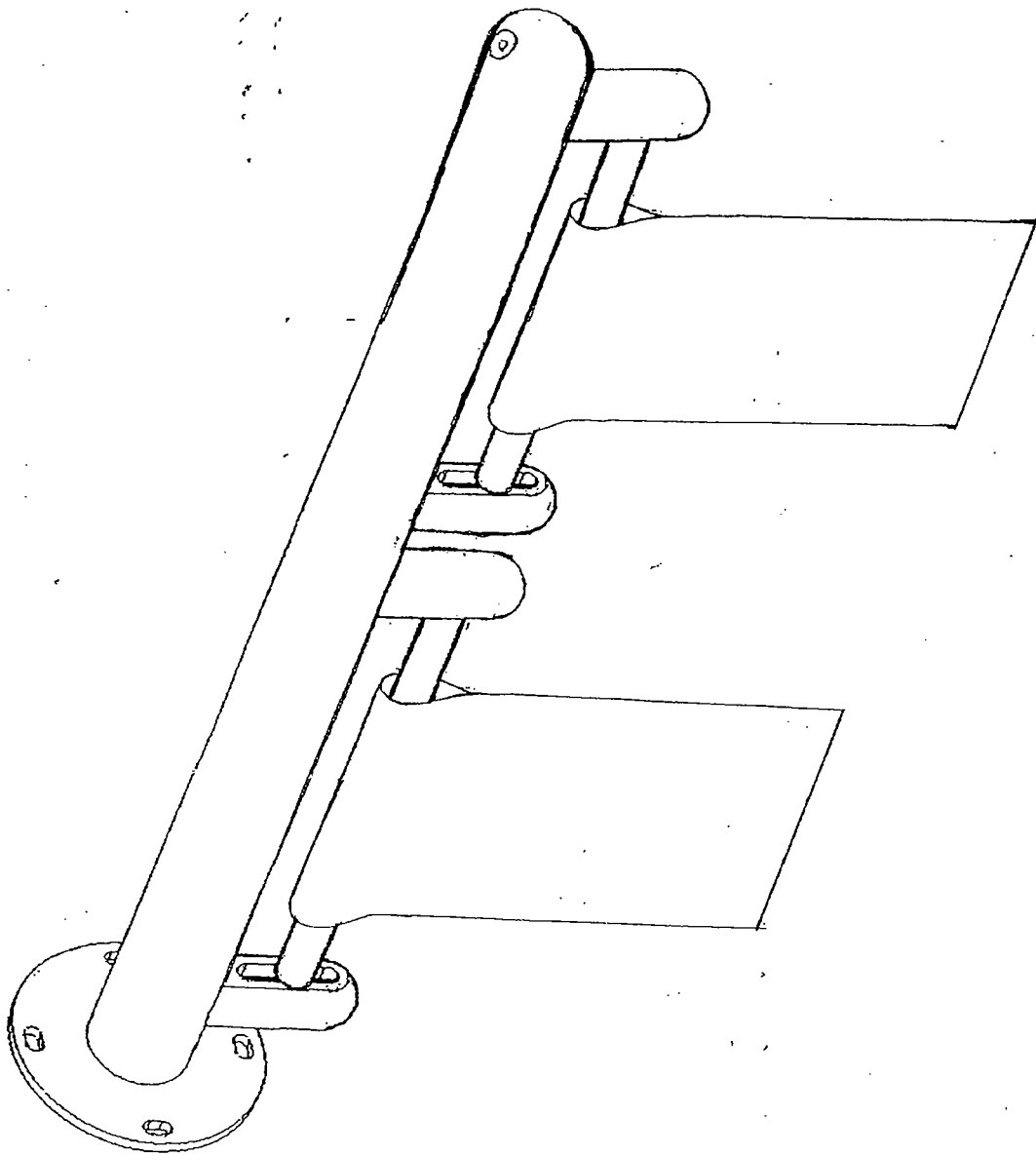


FIG. 5

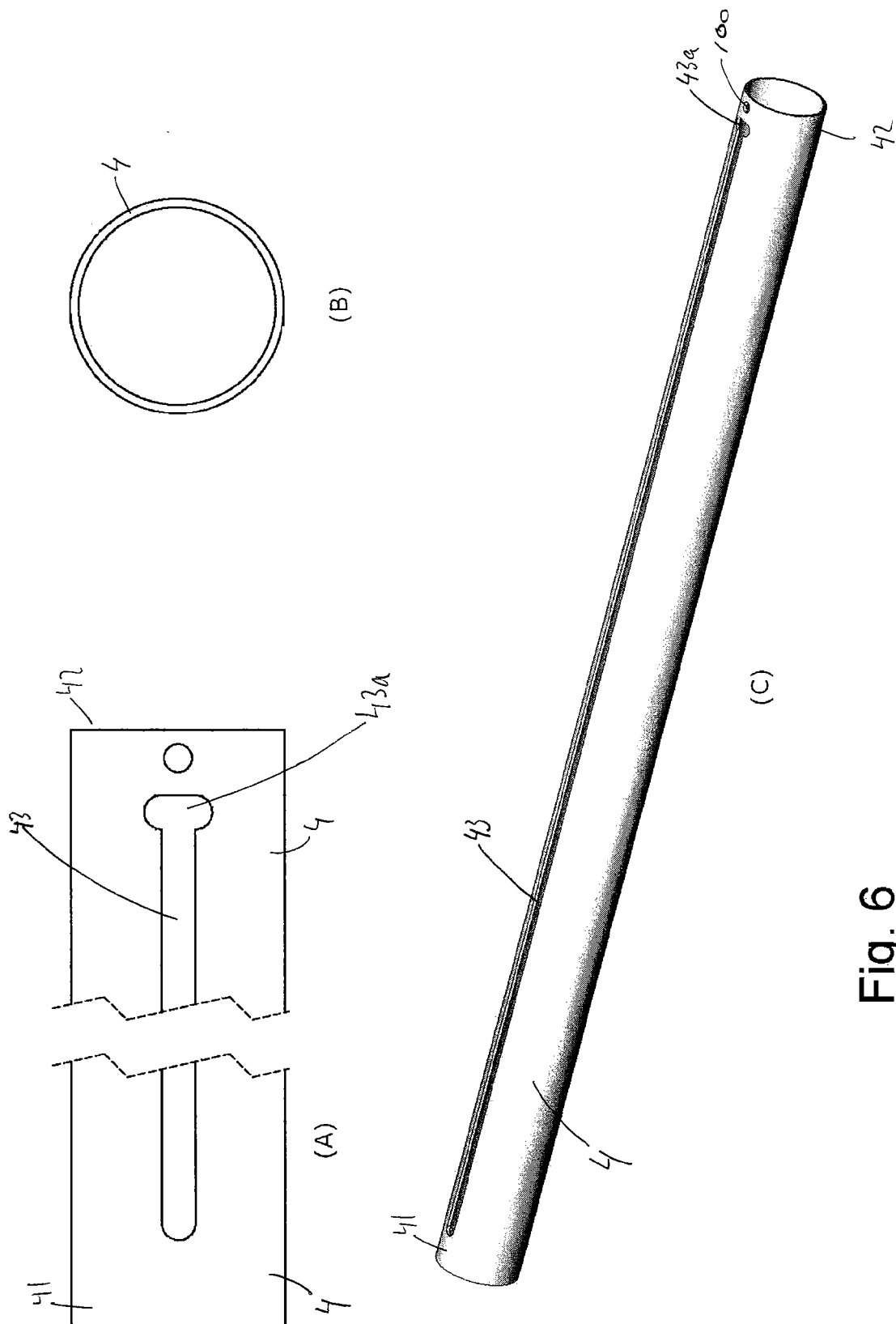


Fig. 6



EUROPEAN SEARCH REPORT

Application Number
EP 10 16 7390

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	FR 2 780 194 A1 (MADINPACK [FR]) 24 December 1999 (1999-12-24)	1-3,5-7, 11-14	INV. G09F7/20 G09F15/00 G09F17/00
Y	* page 1, line 1 - line 5 * * page 5, line 17 - page 7, line 21 * * page 8, line 12 - line 28 * * page 9, line 24 - page 10, line 30 * * figures 1-7c *	4	ADD. G09F7/18
Y	----- FR 2 654 471 A1 (SOMARO [FR]) 17 May 1991 (1991-05-17)	4	
A	* page 1, line 1 - line 5 * * page 4, line 25 - page 6, line 19 * * figures 1-7 *	1-3,5-14	
A	----- DE 93 07 794 U1 (KLOSTERMANN GMBH) 22 July 1993 (1993-07-22) * page 8, line 1 - line 22 * * figures 1-4 * -----	1-14	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC) G09F
Place of search The Hague		Date of completion of the search 8 October 2010	Examiner Pantoja Conde, Ana
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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