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(54)

Multipivot universal stand for price holders, promotional card holders and/or indicators

(57) A multipurpose support for visual communication implements comprising a fixing clip for mounting it on a front molding, a riser or a shelf, a rotatable coupling between said clip and an orientable arm equipped with coupling means with a visual communication implement, characterized in that said fixing clip is in the form of a peg with jaws covered with grooved pads of elastomer, an arm of which forms a bracket orthogonal to the peg's arms; a base is pivotally mounted through a hole of said bracket and turnable about a first axis normal to said bracket by forcing the surmounting of cooperating ridges and indentations coordinately present on juxtaposed coupling surfaces of said turnable base and of said bracket; said orientable arm is pivotally mounted on said turnable base and rotatable about a second axis orthogonal to said first axis, by forcing the surmounting of cooperating ridges and indentations coordinately present on opposite coupling surfaces of said turnable base and orientable arm.

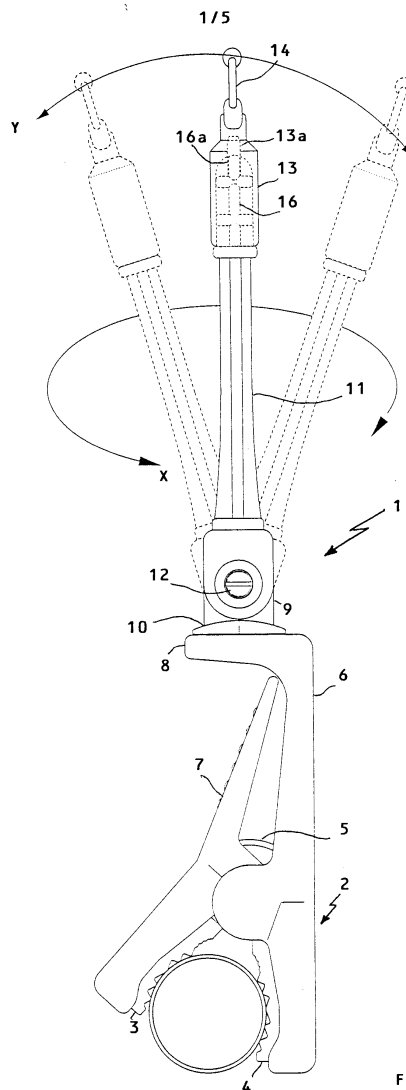


FIG. 1

Description

[0001] The present invention relates to implements and devices for visual communications installed along display shelves of shops and supermarket. In particular, it relates to a multipurpose stand for price tag holders, promotional cards and similar visual communication implements.

[0002] Normally, shop shelves on which the goods are placed have a frontal molding onto which clip-cursors may be easily installed and forcibly slid along the molding. On special couplings means present on the clip-cursor promotional cards and price holders provided with cooperating couplings means may be installed.

[0003] An example of a sealed price holder installable on a clip-cursor is described in the European patent application N. 97830532.4 in the name of the same applicant.

[0004] In many cases it is also desirable to use different types of supports, specifically designed to hold feathering price tags and promotional cards so that they may be visible from a distance along the aisles between shelves. Devices of this type are described in the European patent applications No. 94830325.0, of June 30 1994, and No. 97830619.9, of November 25 1997, both in the name of the same applicant.

[0005] Many of these devices possess peculiar characteristics that make them suitable for specific applications, both for what concerns the structure on which they must be installed and for what concerns the type of implement of visual communication they must support.

[0006] It is evident the need or usefulness of a multipurpose supporting device, that is, a device that may be installed on whatsoever structure, being this a front molding, the edge of a shelf or a post, a tubular or metal wire structure, a box or container, and be orientable in any desired spatial position to support standard or flag-like price holders, promotional cards, and the like.

[0007] All these needs and requisites are met by support of the present invention. It satisfies the requisite of being mountable on practically any type of structure and being capable of sustaining different kinds of visual communication implements practically in the spatial orientation most appropriate for the particular type of implement.

[0008] Substantially, the universal support for priceholders, promotional cards, indicators and similar visual communication implements comprises a fixing clip in the form of a peg with jaws coated or equipped with grooved inserts of elastomer, capable to grip onto structural elements of any shape. The end of one of the two arms of the peg is bent toward the other arm forming an orthogonal base-plate.

[0009] A "plinth" is pivotally mounted onto such a base-plate, such to be able to be rotate about a first axis normal to the plane of the base-plate termination of the peg's arm, by forcing the surmounting of cooperating ridges and depressions functionally formed on juxtaposed assembling surfaces of the turning plinth and of the base-plate termination of the peg's arm.

posed assembling surfaces of the turning plinth and of the base-plate termination of the peg's arm.

[0010] A slender post or orientable arm of the "universal" support of the invention has one end pivotally mounted on the plinth such to be able to be rotated about a second axis, orthogonal to the first axis, again by forcing the surmounting of cooperating ridges and depressions functionally formed on juxtaposed assembling surfaces of the orientable arm's and of the plinth pivotally mounted of the base-plate termination of the peg's arm.

[0011] The free end of the orientable arm may ends with a shank having a generally polygonal section. The shank fits in a non-turning manner into a cooperating female receptacle of a price holder or a promotional card frame or of a flag-like projecting promotional card or of any similar visual communication implement.

[0012] The universal multipivot support of the invention offers an outstanding freedom to spatially orient the supported implement to ensure an optimal visibility regardless of the fixing possibilities offered by the structure.

[0013] The various aspects and advantages of the invention will become even clearer through the ensuing description and by referring to the attached drawings, wherein:

Figure 1 is a side view of the device of the invention; **Figure 2** is another side view of the device of the invention in a different position.

Figure 3 is front view of the device;

Figure 4 is an exploded view of several parts of that compose the fastening peg and the turnable plinth assembly;

Figure 5 is an exploded detail view showing the way the turning plinth is mounted on the base-plate termination and the orientable arm is pivotally mounted on the plinth;

Figure 6 is a view of the assembled parts of Figure 5;

Figure 7 is a detail side view of the double joint of figure 6.

[0014] The same parts are indicated with the same numbers in all the figures for easier cross-reference.

[0015] The fastening element of the universal multiple joint support of the invention, indicated as a whole with 1, is constituted by a peg, indicated as a whole with 2.

[0016] The peg's jaws 3 and 4 are constituted by grooved inserts of elastomer and ensure a firm grip to differently shaped structure members.

[0017] In the illustrated example, the peg 2 has a U-shaped flat spring, although other types of spring may be alternatively utilized, such as for example a helical spring.

[0018] One of two arms of the peg (6 in the example shown) has its end bent toward the opposite arm 7, forming a base-plate or bracket 8, substantially orthog-

onal to the peg's arm 6.

[0019] On this bracket 8 is installed a turnable base or plinth 9, held by a counter washer 10 which is compressed against the top surface of the bracket 8. The end of one orientable arm 11 is pivotally mounted on the turning base or plinth 9, by means of an assembling bolt 12.

[0020] The orientable arm 11 has an shank 16 with a polygonal cross section point 16a, suitable to fit into a cooperating receptacle 13a of a socket 13 of an adapter 14 to hold a price holder or a flag-like card holder or of another adapter 15 (Figure 3), for example for message frames or other types of price holders and alike. The coupling of the shank point 16a into the receptacle 13a, both of polygonal section, for example a square cross-section, prevents rotation of the adapter 14 which supports the price or card holder or another implement of visual communication.

[0021] The exploded partial view of figure 4 shows the main components of the fastening peg 2 of the universal multiple-joint support, to fasten it to any vertical, slanted or horizontal member, of a fixed structure and of the turnable base or plinth 9 mounted on the bracket termination of the peg's arm 6.

[0022] The turnable base 9 has a terminal circular flange 9a fitting into a circular stepped hole 9h present in the bracket 8.

[0023] From the upper circular face 9c of the turnable base 9 seated into the receiving hole 9h, rises a flat vertical bracket 9d ending with a circular perimeter essentially concentric to the central hole 9f. In the shown embodiment along the circular perimeter there are indentations 9e spaced at regular intervals.

[0024] The counter washer 10 has a central slot 9g through which the vertical bracket 9d pass. On the bottom face of counter washer 10 there are radial ridges 9b and the counter washer 10 has a convex top face.

[0025] Figures 5 and 6, respectively exploded and assembled detail views, show how the turnable base 9 is introduced in the hole 9h of the bracket termination 8 of the peg's arm 6, the counter washer 10 is inserted as a counter flange along the vertical bracket 9d of the turnable base and the fork-like termination 11a of the orientable arm 11 is inserted, and the assembly is ultimately held by the pivot bolt 12 blocked by the nut 12a.

[0026] As may be observed in figures 1, 2 and 3, the two arms of the fork-like termination 11a of the orientable arm 11 end with a circular perimeter and once the assembly is complete, they bear on the tangent surface of the top convex face of the counter washer 10.

[0027] In practice, upon inserting the pivot bolt 12 and blocking it with the nut 12a, the turning double pivoting joint, rotating axes of which are indirectly though clearly identified by the respective arrows X and Y shown in figures 1 and 2, is completely assembled.

[0028] The partial side view of figure 7 shows how spaced indentations 9e present along the circular perimeter of the vertical bracket 9d cooperate with the

probing fingers 11 b formed at the notch of the fork end 11 a of the arm 11, in defining as several preordered angular positions. Of course, more closely spaced indentations along the perimeter of the vertical bracket 9d will provide for more selectable angular of the swingable arm 11.

[0029] Orientation of the turnable base 9 is also pre-orderly established by forcing the surmounting by the radial ridges 9b present on the coupling face of the counter washer 10 of the flat portions of surface that separate a coordinated plurality of radial depressions present on the coupling face of the bracket 8 (not shown in the figures), such to determine an orientability of the turnable base 9 through relatively small pre-established angular increments along the whole circumference.

[0030] As schematically shown in Figure 3, the shank 16 of the free end of the orientable arm 11 fitting in the cooperating receptacle of any suitable type of adapter 14, 15 prevent any undesired rotation of the adapter about the arm's axis.

[0031] Apart from the grooved elastomer inserts 3 and 4 of the peg's jaws, the peg's spring 5 and the pivot-bolt 12 and the nut 12a, all the pieces that compose the universal multiple joint support of the invention may be fabricated by molding, employing a suitable plastic material, such as for example ABS, Nylon®, Hostaform® and alike resins.

[0032] Other embodiments are possible.

[0033] By way of example, the pivot coupling between the swingable arm 11 and the turnable base 9 may be realized in a different manner than that of the figures. For instance, the coupling between the end of the arm 11 and the base 9 may employ radial ridges and cooperating radial grooves respectively made on juxtaposed coupling faces between the vertical bracket 9d and the arm's end, rather than between the indentations 9e and the fingers 11b.

Claims

1. A multipurpose support for visual communication implements comprising a fixing clip for mounting it on a front molding, a riser or a shelf, a rotatable coupling between said clip and an orientable arm equipped with coupling means with a visual communication implement, characterized in that

said fixing clip is in the form of a peg with jaws covered with grooved pads of elastomer, an arm of which forms a bracket orthogonal to the peg's arms;

a base is pivotally mounted through a hole of said bracket and turnable about a first axis normal to said bracket by forcing the surmounting of cooperating ridges and indentations coordinately present on juxtaposed coupling surfaces of said turnable base and of said bracket;

said orientable arm is pivotally mounted on said turnable base and rotatable about a second axis orthogonal to said first axis, by forcing the surmounting of cooperating ridges and indentations coordinately present on opposite coupling surfaces of said turnable base and orientable arm. 5

2. The multipurpose support according to claim 1, characterized in that said coupling means with a visual communication implement comprise a shank termination of said orientable arm and a receptacle of a female adapter, said shank and said receptacle having a polygonal section establishing a plurality of predefined angular positions of coupling and impeding undue mutual rotation. 10 15

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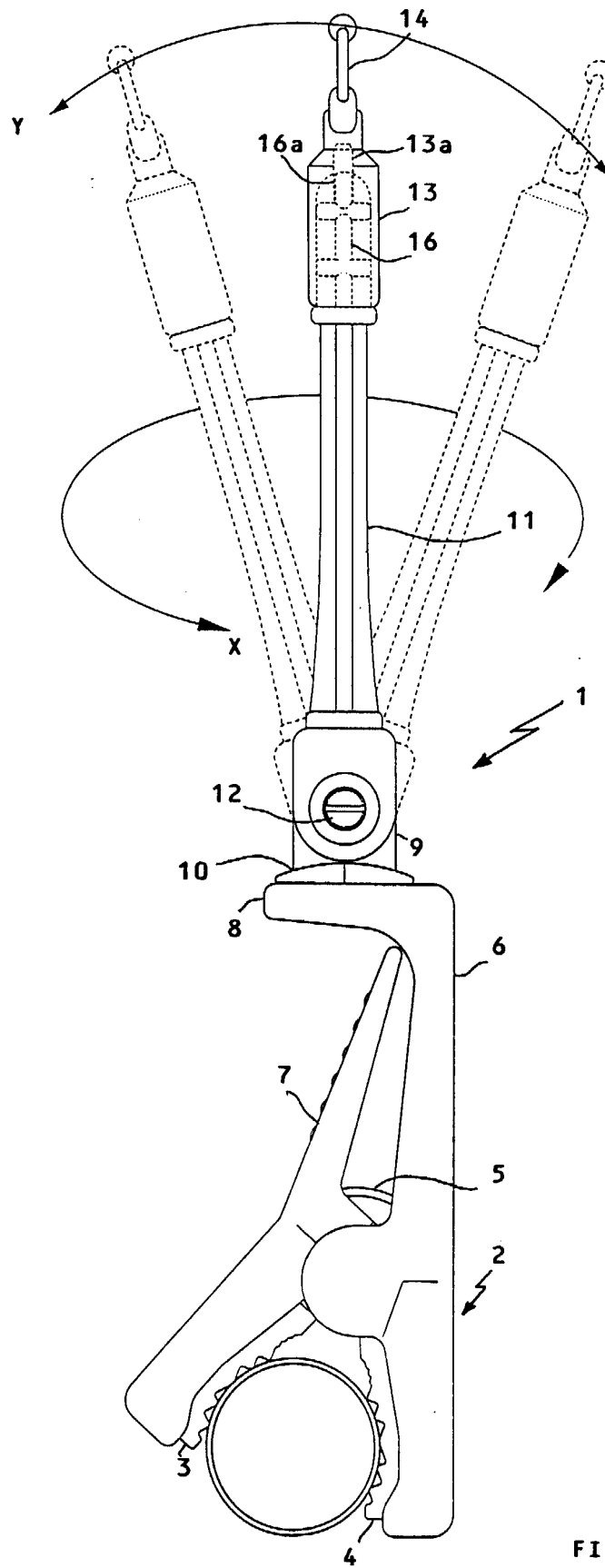


FIG. 1

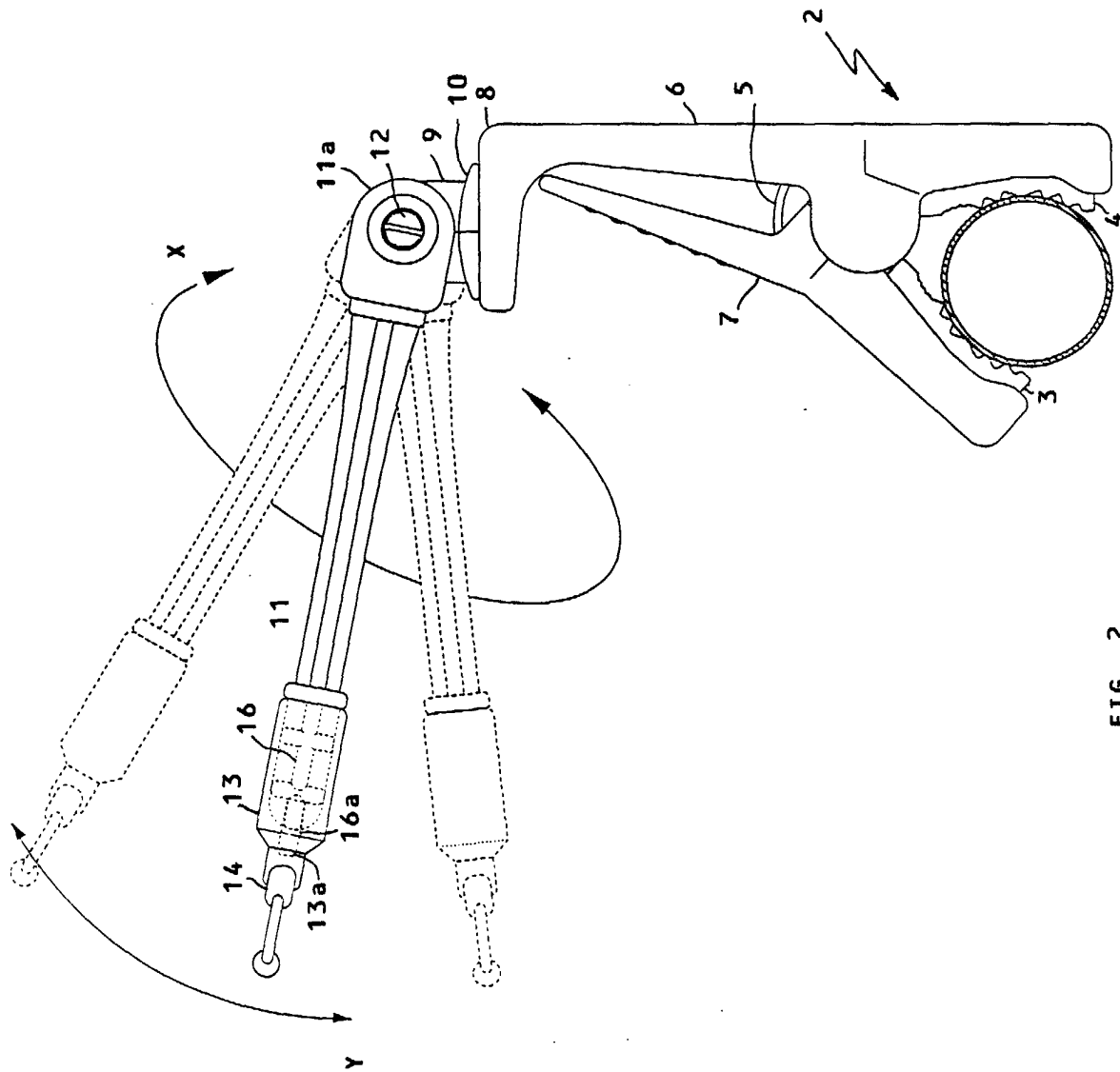


FIG. 2

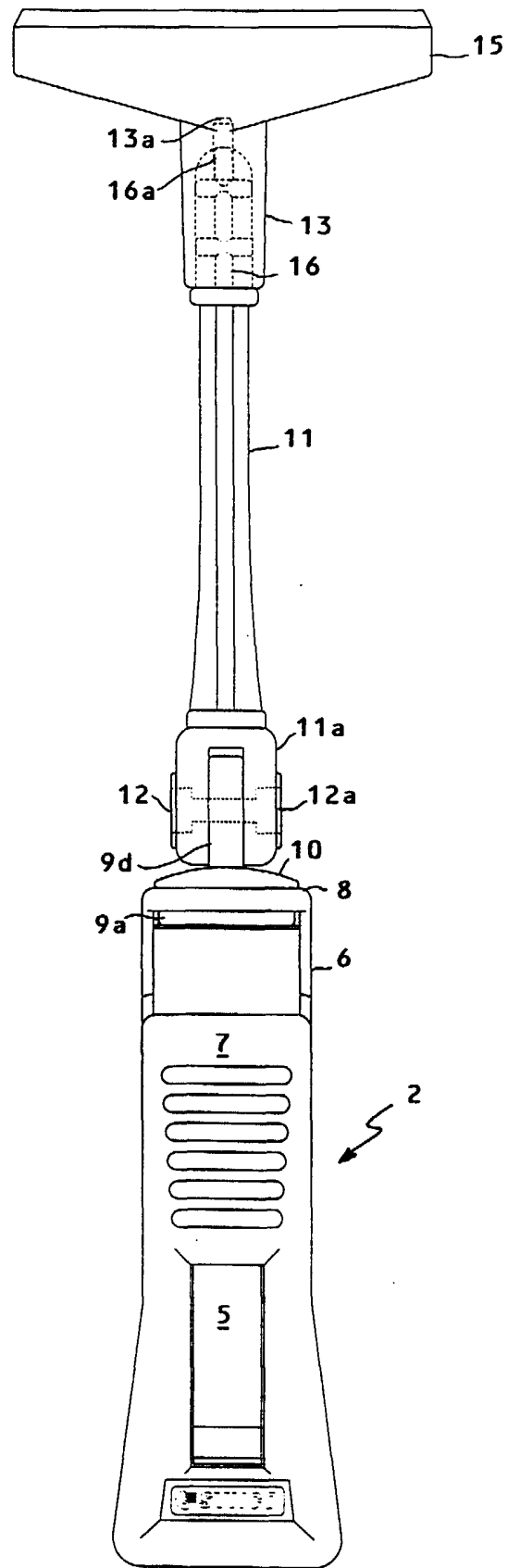


FIG. 3

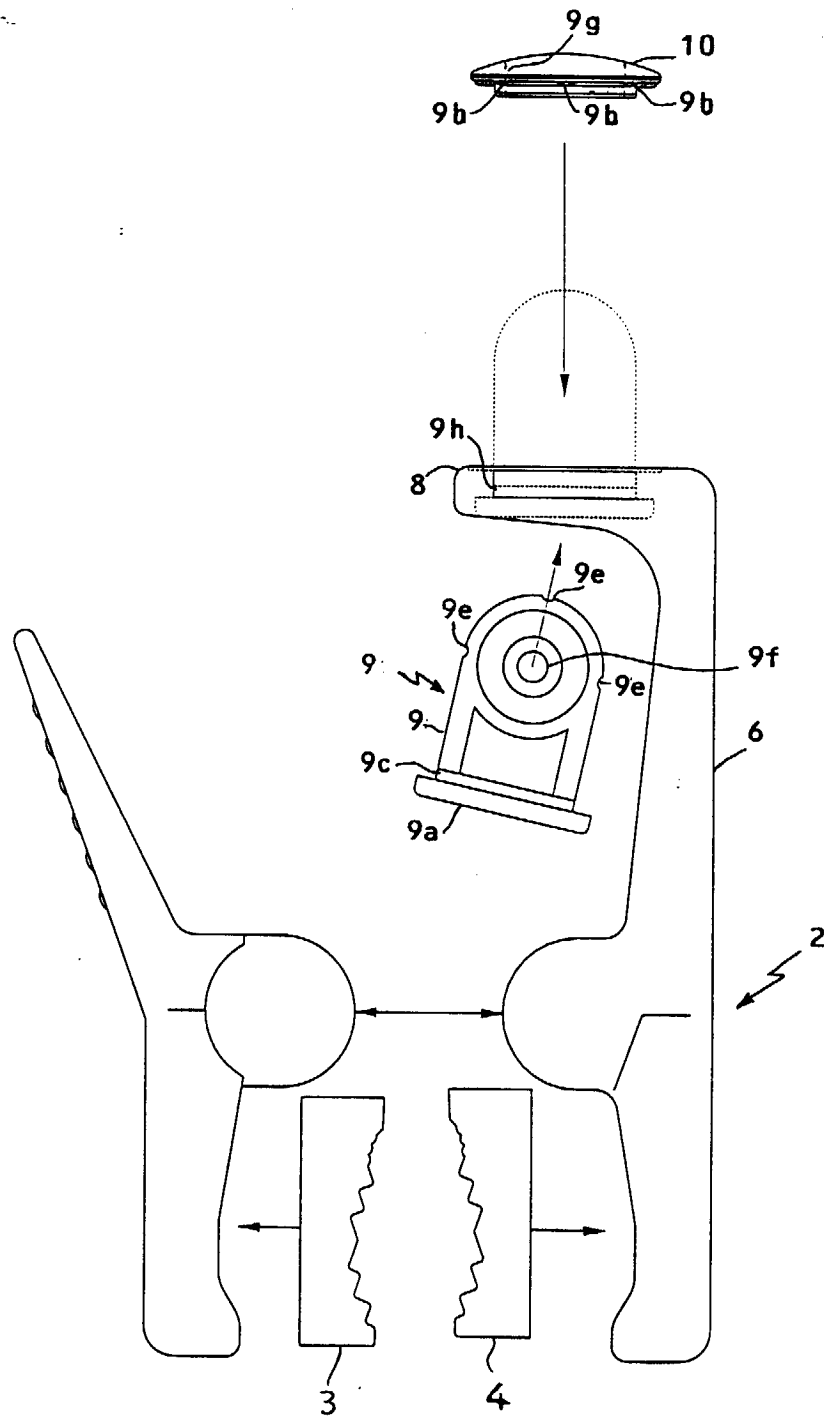


FIG. 4

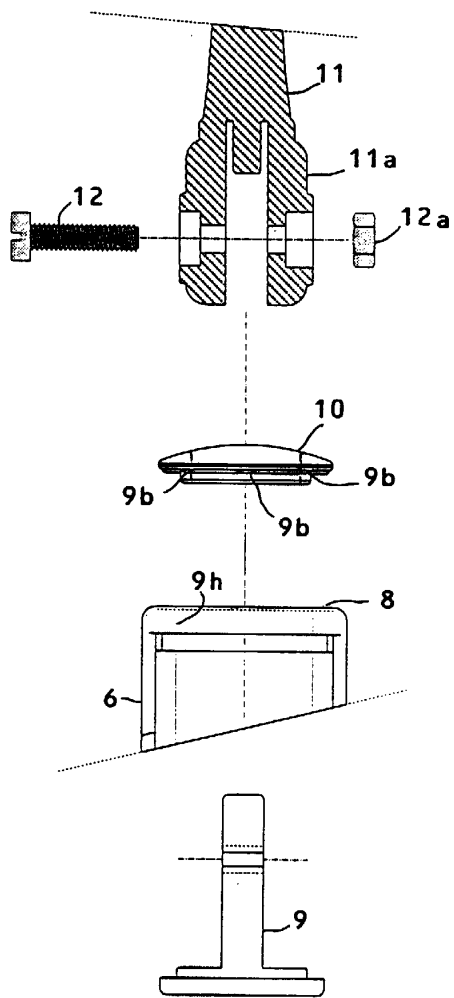


FIG. 5

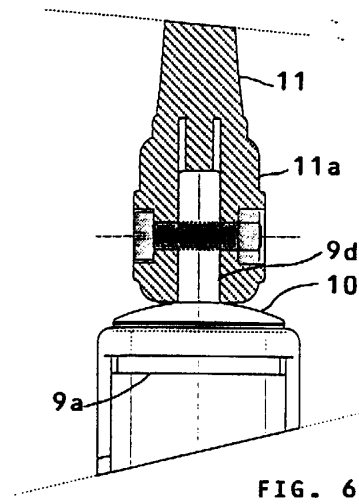


FIG. 6

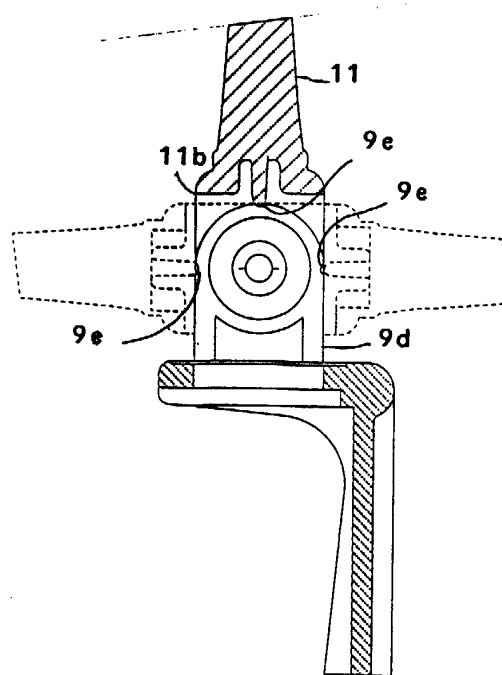


FIG. 7



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 99 83 0232

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION
Y	US 3 877 163 A (BISSONET CLAUDE) 15 April 1975 (1975-04-15) * column 1, line 52 - column 2, line 15; figures 1,2 *	1	G09F7/22 G09F3/20
Y	US 4 881 707 A (GARFINKLE BENJAMIN L) 21 November 1989 (1989-11-21) * column 2, line 43 - column 3, line 14; figures 1-3 *	1	
A	US 4 786 025 A (SHUMAN BERNARD) 22 November 1988 (1988-11-22) * column 3, line 45 - column 4, line 29; figures 1,2 *	1,2	
A	US 4 192 441 A (BATTS JOHN H) 11 March 1980 (1980-03-11) * column 2, line 37-41; figures 1-3,14 * * column 4, line 17-22 *	1	
A	DE 296 22 598 U (GROS HEIDEMARIE) 20 February 1997 (1997-02-20) * page 6, line 14-34; figures 1,2 *	1	TECHNICAL FIELDS SEARCHED G09F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 September 1999	Examiner Jandl, F
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			

EPO FORM 1503 03 82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 83 0232

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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21-09-1999

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 3877163	A	15-04-1975	NONE		
US 4881707	A	21-11-1989	CA	2010116 A,C	23-08-1990
US 4786025	A	22-11-1988	NONE		
US 4192441	A	11-03-1980	CA	1116378 A	19-01-1982
			EP	0007246 A	23-01-1980
			JP	1246873 C	16-01-1985
			JP	55016691 A	05-02-1980
			JP	59021619 B	21-05-1984
DE 29622598	U	20-02-1997	NONE		