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(54) Support for a curtain group

(57) The support for a curtain group comprises, in known ways, a base body (2) designed to be fixed to a wall with an interposing of a metal plate (3), and provided with innovative magnetic coupling means (5,6), associated to the base body (2) destined to interact with the metal plate (3) in order to enable support of the base body (2) during a positioning stage thereof on the plate (3).

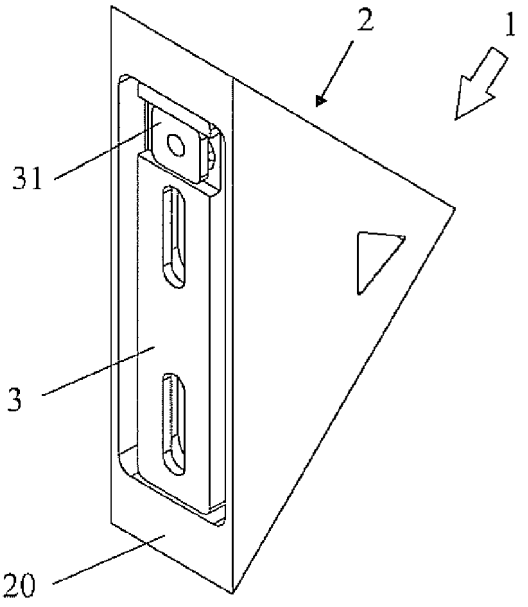


FIG. 1

EP 2 361 537 A1

Description

[0001] The present invention relates to the technical sector of curtain groups, with particular reference to a support for the curtain groups.

[0002] In like applications, curtain groups are generally of two types, i.e. roller or traditional.

[0003] Roller curtain groups comprise a roller supported bilaterally and horizontally, on which the curtain opens and closes with the aid, in know ways, of a chain, a motor or a spring.

[0004] "Traditional" curtain groups comprise a rod bilaterally supported horizontally and provided with hooking means of the curtain, which can translate along the rod and at least partially close in a stack-fashion, according to known ways.

[0005] In a case of particularly long rods, for questions of stability there may be an intermediate support in the central zone.

[0006] For both types of curtain groups the relative supports are generally fixed to the wall (wall or ceiling) by interposing of plates.

[0007] The plates are generally provided with a pair of slots, longitudinal and transversal, which are fixed by threaded screws which insert in plugs fixed to the wall.

[0008] The supports are then mounted on the plates and fixed thereto generally by means of screws which insert in threaded seatings provided in the plates.

[0009] During this stage of assembly the installer is faced with the problem of performing the following operations: maintaining the supports in position with respect to the plates, and at the same time inserting the screws in the holes afforded in the plates and the supports, verifying the alignment thereof, and thereafter tightening the screws until they grip in the relative plugs.

[0010] The instability of the initial positioning of the supports with respect to the plates, which can be guaranteed only manually by the installer, makes the following insertion and screwing operations of the threaded screws difficult, and generally slows work down during the installation step.

[0011] The use of a second support installer to aid the first is particularly expensive in terms of labour costs.

[0012] The times spent and the quality of mounting is therefore fundamentally dependent on the ability of the installer, where by quality a correct alignment and orientation of the support with respect to the plate is meant.

[0013] The aim of the present invention is to obviate the above-described drawbacks by providing a support for a curtain group which enables the installer to perform an especially rapid and easy mounting, while at the same time offering an excellent standard of quality.

[0014] A further aim of the invention is to provide a support for curtain groups able to guarantee mounting steps that are extremely simple and intuitive, within the grasp of any installer, even one who has no previous experience.

[0015] The above aims are attained by a support for a curtain group, of a type comprising a base body suitable for being fixed to a wall with an interposing of a metal plate and provided with means for supporting the curtain group, characterised in that it comprises magnetic coupling means, associated to the base body and suitable for interacting with the metal plate in order to enable support of the base body during the step of positioning the base body on the plate.

[0016] In particular embodiments, the support for a curtain group that is object of the invention comprises one or more of the following characteristics, considered singly or in combination:

- mechanical coupling means are provided of the base body to the plate, destined to be activated subsequently of the positioning of the base body on the plate, for stabilising the mutual coupling thereof;
- the mechanical coupling means comprise at least a through-hole, afforded in the base body, suitable for being engaged by a threaded screw destined to interest a threaded seating afforded in the plate;
- the threaded seating afforded in the plate is a through-seating;
- at least an integrating element of the base body is provided, provided with a metal insert destined to interact with the magnetic coupling means in order to enable support and/or fastening of the integrating element to the base body;
- the magnetic coupling means comprise at least a magnetic block housed in a seating afforded in the base body;
- the magnetic block is housed in proximity of an end of the base body;
- the housing seating of the magnetic block is accessible on the opposite side of the base body with respect to the coupling side with the plate;
- a pair of magnetic blocks are provided, associated to the base body;
- the base body 2 is U-shaped and identifies a dorsal part destined to couple with the metal plate and two lateral sides which enable fastening of a support arm of the curtain group.

[0017] The characteristics of the invention will emerge from the following description, in which some preferred but not exclusive embodiments will be described by way of non-limiting example, with reference to the accompanying figures of the drawings, in which:

figures 1, 2, 3 illustrate three perspective views of

the support for a curtain group of the invention, from different angles;

figures 4, 5 show corresponding front and back views of the support for a curtain group illustrated in figures 1, 2, 3;

figures 4A, 5A are views along respective sections A-A, B-B illustrated in figures 4 and 5;

figures 6, 7 illustrate two perspective views from different angles along section A-A indicated in figure 4A;

figures 8, 9 show two perspective views, one exploded and one in assembled configuration, of the support for a curtain group in a particular embodiment.

[0018] With reference to the figures of the drawings, 1 denotes the support for a curtain group of the invention, comprising, in known ways, a base body 2 destined to be fixed to the wall with an interposing of a metal plate 3 and provided with supporting means 4 of the curtain group, and comprising, in a novel way, magnetic coupling means 5, 6, associated to the base body 2, destined to interact with the metal plate 3 such as to enable support of the base body 2 during the step of positioning the base body 2 on the plate 3.

[0019] For the sake of greater clarity, the curtain group is not illustrated in the figures of the drawings, since as mentioned in the preamble hereto it can be either of a traditional type or a type with a roller.

[0020] Also provided are mechanical coupling means of the base body 2 to the plate 3, destined to be activated after the positioning of the base body 2 on the plate 3 such as to stabilise the mutual coupling thereof.

[0021] By way of example, the mechanical coupling means comprise a pair of through-holes 70, afforded at the ends of the base body 2, at least one of which is destined to be interested by a threaded screw 71 destined to insert in a threaded seating 30, preferably a through-seating, afforded in the metal plate 3 (figure 4A).

[0022] In this way the base support body 2 can be stably coupled to the plate 3 by means of the threaded screw 71, with any vertical orientation as long as there is an alignment between the threaded seating 30 and one of the through-holes 70.

[0023] The magnetic coupling means comprise a pair of magnetic blocks, an upper block 5 and a lower block 6, housed in corresponding seatings afforded in the base body 2, preferably symmetrically to the transversal axis Y, in proximity of the ends of the base body 2 (figure 4).

[0024] By way of example, the housing seatings of the two magnetic blocks 5, 6 are made to be accessible on the side of the base body 2 opposite 2a with respect to the coupling side 2b with the plate 3.

[0025] In this way the blocks 5, 6 can be removed and/or replaced without disengaging the base body 2 from the metal plate 3.

[0026] With reference to the accompanying figures of the drawings, and in particular figures 8 and 9, in a particular embodiment the base body 2 is substantially U-shaped and identifies a back 20 destined to couple with the metal plate 3, and two lateral sides 21 for enabling fastening to a support arm 4 of the curtain group.

[0027] The fastening modes of the arm 4 to the base body 2 are the subject of a separate patent application for industrial invention in the name of the present applicant.

[0028] Also provided are a pair of elements, an upper element 8 and a lower element 9, for integrating to the base body 2, provided with corresponding metal inserts 80, 90 destined to interact with the magnetic blocks, an upper block 5 and a lower block 6, for enabling support and/or fastening of the integrating elements 8,9.

[0029] As can be seen in figures 8 and 9, in this case the integrating elements 8, 9 enable the through-holes 70 and the threaded screw 71 to be aesthetically covered, and enable a regulating adjustment of the support arm 4.

[0030] Apart from this, the interaction of the metal inserts 80, 90 with the magnetic blocks 5, 6 enables the integrating elements 8, 9 to be fixed without the aid of threaded screws, again to the benefit of the aesthetic characteristics.

[0031] The mounting modes of the support 1 for a curtain group of the invention are now briefly described.

[0032] First the metal plate 3 is fixed to the wall, for example by means of threaded screws which engage in relative wall-mounted plugs.

[0033] According to the specifications, the plate 3 can be fastened either to the wall or the ceiling.

[0034] Then the plate 3 is positioned on the base body 2, which is coupled and supported thereby thanks to the interaction between the magnetic blocks 5, 6 and the metal structure of the plate 3.

[0035] When performing this positioning it is advantageous to verify the alignment between the threaded seating 30 of the plate 3, which can advantageously be provided on a transversally-slidable slide 31, and one of the through-holes 70 of the base body (figures 4A, 5A).

[0036] Then the threaded screws 71 are inserted in the through-hole 70 of the base body 2 up to engaging the aligned threaded seating 30 of the plate 3 and guaranteeing a stable mechanical coupling thereof with the base body 2.

[0037] It is understood that according to specific applications, by advantageously dimensioning the magnetic blocks 5, 6 and/or possibly increasing the number, it is possible to guarantee the coupling stability of the base body 2 on the metal plate 3 even in the absence of the mechanical coupling means.

[0038] From the above it clearly emerges how the support for a curtain group of the invention advantageously enables an especially rapid and easy mounting to be made by a lone installer.

[0039] This is fundamentally due to the presence of

the magnetic blocks which enable a stable positioning of the base body on the metal plate fixed to the wall.

[0040] According to cases, the coupling of the base body to the metal plate can be stabilised by means of mechanical means, for example by means of a threaded screw which inserts in a through-hole afforded in the base body such as to engage in an aligned threaded seating afforded in the plate.

[0041] On the basis of what is described herein above, it can easily be understood how the support for a curtain group, object of the invention, is able to guarantee extremely simple and intuitive mounting steps, within the scope of ability of any installer, even one without experience.

[0042] The invention has obviously been described, with reference to the accompanying figures, purely by way of non-limiting example, and it is therefore clear that all modifications and variants can be brought thereto which in any case fall within the ambit as defined in the following claims.

Claims

1. A support for a curtain group, comprising a base body (2) designed to be fixed to a wall with an interposing of a metal plate (3), and provided with support means (4) of the curtain group: **characterised in that** it comprises magnetic coupling means (5,6), associated to the base body (2) destined to interact with the metal plate (3) in order to enable support of the base body (2) during a positioning stage thereof on the plate (3).

2. The support of claim 1, **characterised in that** it comprises mechanical coupling means of the base body (2) to the plate (3), destined to be activated subsequently to a positioning of the base body (2) on the plate (3) in order to stabilise a mutual coupling thereof.

3. The support of claim 2, **characterised in that** the mechanical coupling means comprise at least a through-hole (70), afforded in the base body (2) and destined to be engaged by a threaded screw (71) destined to interest a threaded seating (30) afforded in the plate (3).

4. The support of claim 3, **characterised in that** the threaded seating (30) afforded in the plate (3) is a through-seating.

5. The support of one of claims from 1 to 4, **characterised in that** it comprises at least an integrating element (8, 9) of the base body (2), which integrating element (8, 9) is provided with a metal insert (80, 90) destined to interact with the magnetic coupling means (5, 6) in order to enable support and/or fastening of the integrating element (8, 9).

6. The support of one of claims from 1 to 5, **characterised in that** the magnetic coupling means comprise at least a magnetic block (5, 6) housed in a seating afforded in the base body (2).

7. The support of claim 6, **characterised in that** the magnetic block (5, 6) is housed in proximity of an end of the base body (2).

8. The support of claim 6 or 7, **characterised in that** the housing seating of the magnetic block (5, 6) is accessible at a side of an opposite side (2a) of the base body (2) to a coupling side (2b) of the base body (2) with the plate (3).

9. The support of one of claims from 6 to 8, **characterised in that** it comprises a pair of magnetic blocks (5, 6) associated to the base body (2).

10. The support of one of claims from 1 to 9, **characterised in that** the base body (2) is U-shaped and identifies a back (20) designed to couple with the magnetic plate (3), and two lateral sides (21) for enabling fastening of a support arm (4) of the curtain group.

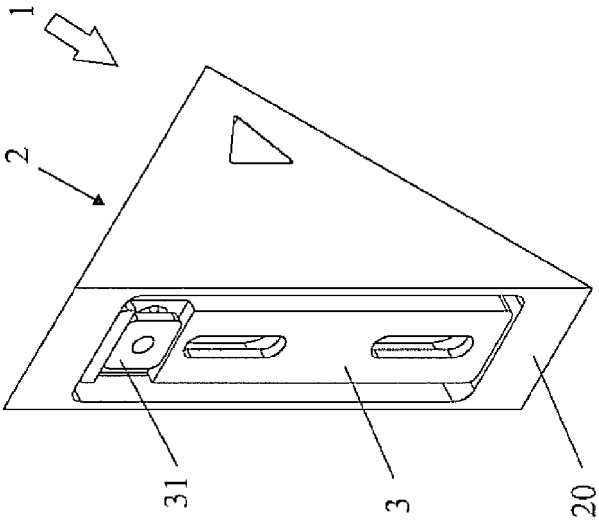


FIG. 1

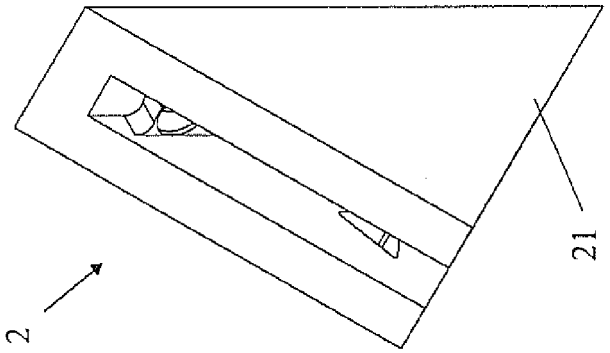


FIG. 2

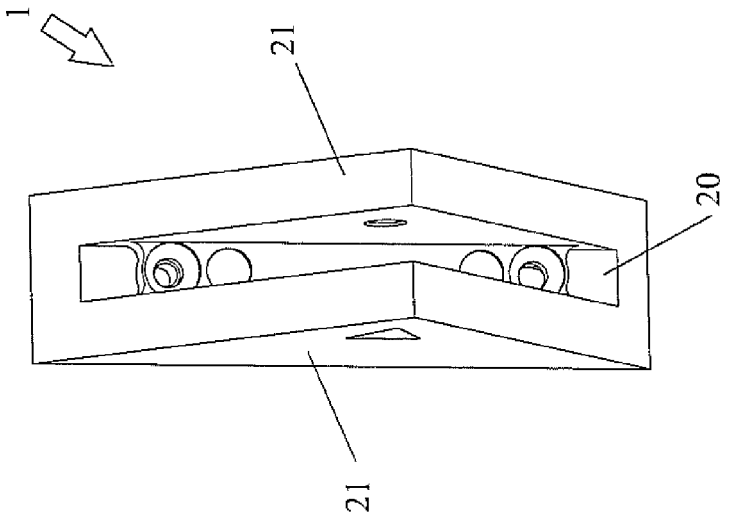
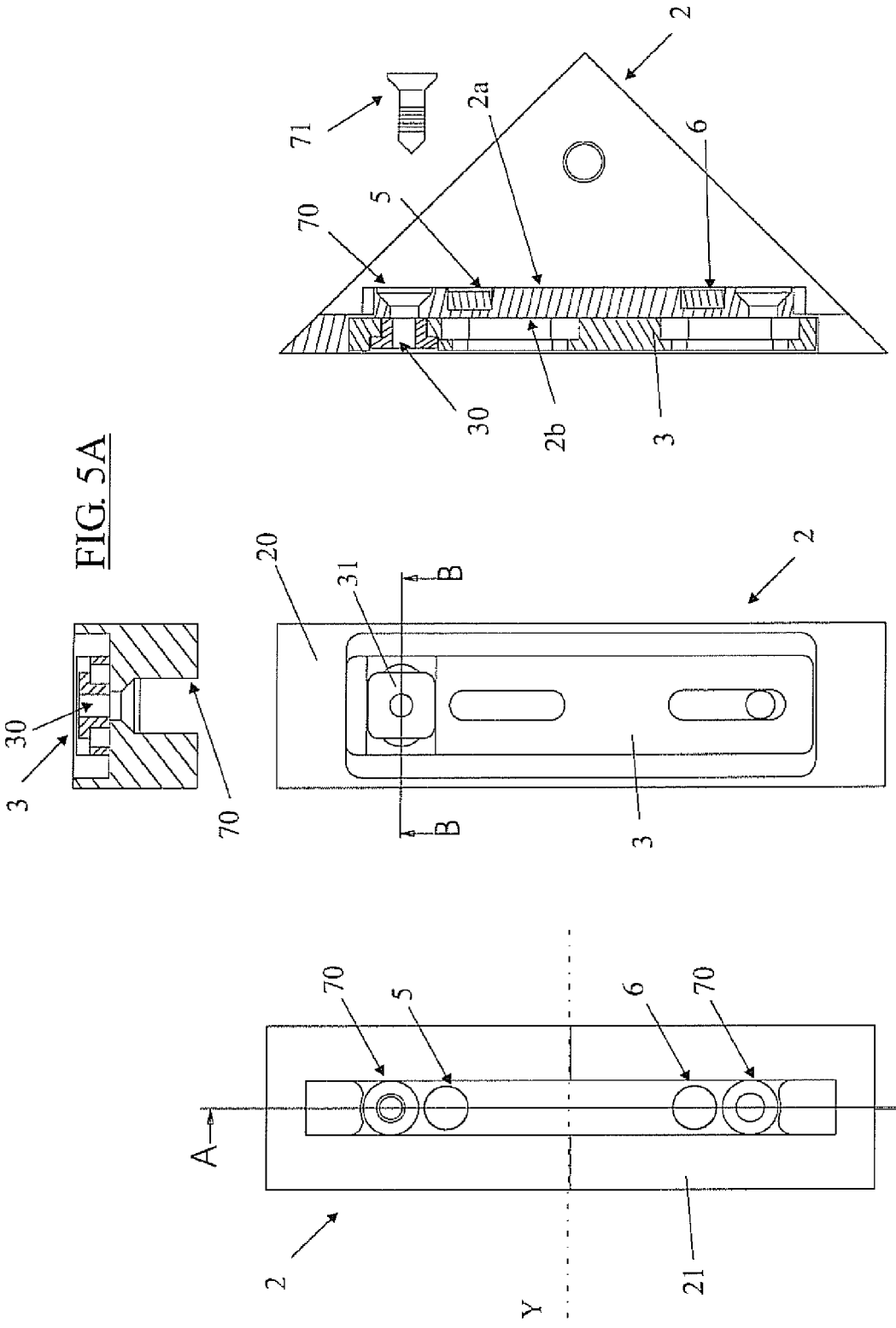


FIG. 3


2
71
2a
6
5
70
30
2b
3
FIG. 4A
FIG. 5A
30
3
70
20
31
B
B
2
3
FIG. 5
A
A
70
5
6
70
2
21
Y
FIG. 4

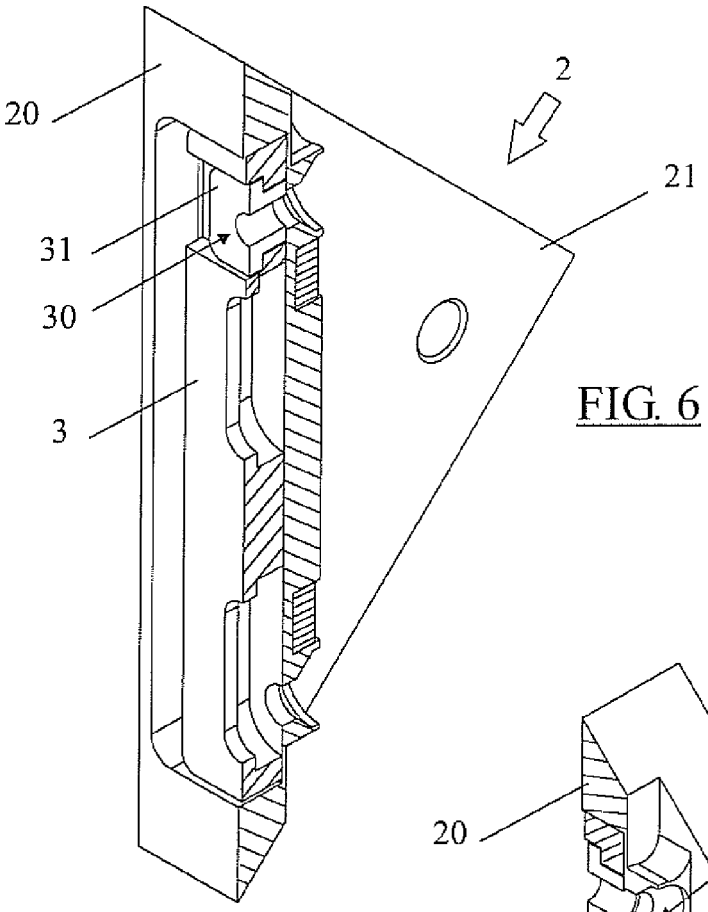


FIG. 6

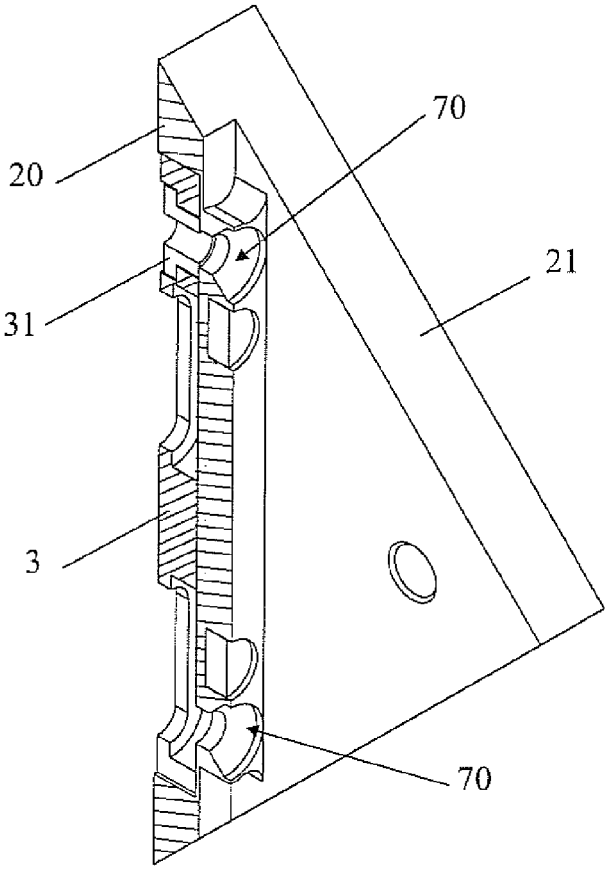


FIG. 7

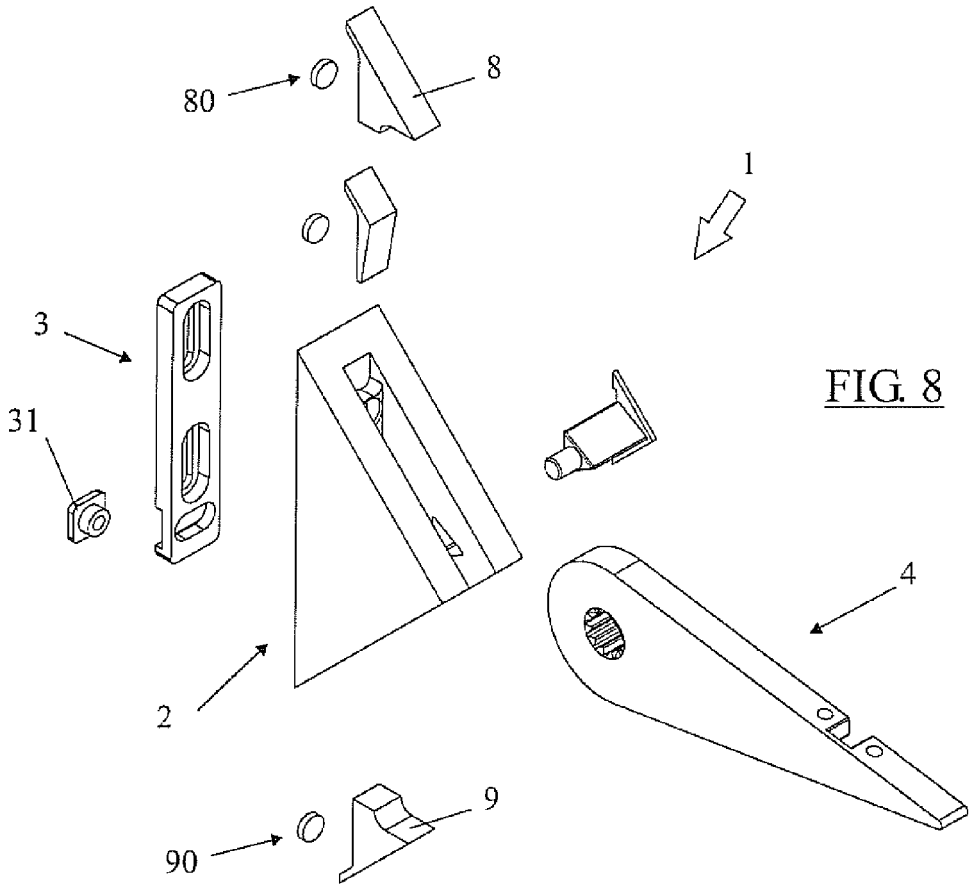


FIG. 8

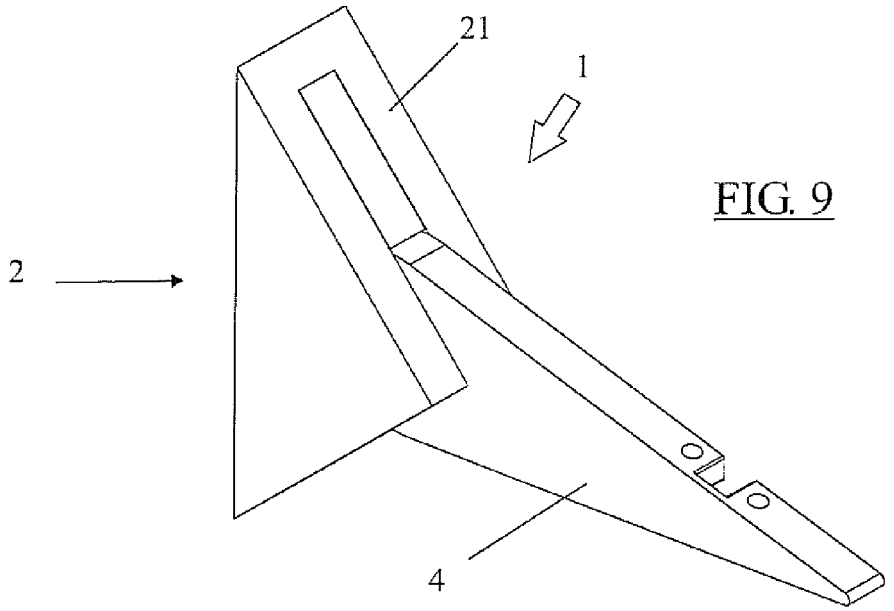


FIG. 9

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EUROPEAN SEARCH REPORT

Application Number
EP 11 15 5840

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A	DE 197 36 944 A1 (WISUSCHIL URSULA [DE]) 24 September 1998 (1998-09-24) * claims; figures *	1	

TECHNICAL FIELDS SEARCHED (IPC)

A47H
A47B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	25 May 2011	Fordham, Alan

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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1

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25-05-2011

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82