(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 2 500 892 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention of the grant of the patent:
17.09.2014 Bulletin 2014/38

(51) Int Cl.:
G09F 7/22 *(2006.01)*

(21) Application number: **11158476.9**

(22) Date of filing: **16.03.2011**

(54) **Display device**

Anzeigevorrichtung

Dispositif d'affichage

(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 RS SE SI SK SM TR

(43) Date of publication of application:
19.09.2012 Bulletin 2012/38

(73) Proprietor: **JT International S.A.**
1211 Geneva 26 (CH)

(72) Inventor: **Lurquin, Vincent**
4130 Esneux (BE)

(74) Representative: **Haley, Stephen**
Gill Jennings & Every LLP
The Broadgate Tower
20 Primrose Street
London EC2A 2ES (GB)

(56) References cited:
FR-A1- 2 899 007
GB-A- 2 461 875
US-A1- 2004 154 202
US-B1- 6 996 929

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

EP 2 500 892 B1

Description

[0001] The present invention relates to a device for displaying information to consumers.

[0002] Efficient use of storage space improves productivity of stores wherein products are stocked and offered for sale to consumers. Thus, current stores experience a continuing desire to efficiently use storage space.

[0003] Products held in store service areas, for example on display shelves, are often not open to public inspection. Accordingly, it is important that the consumer be able to readily identify such products from a distance.

[0004] Given the requirement that customers are able to identify the product from a distance, existing storage solutions wherein the products are held under the counter are not appropriate. Similarly, solutions based on containers placed on the shelf also do not fulfil this requirement, since, although viewable themselves, containers obscure the actual products for sale. Furthermore, simply packing products onto a shelf often leads to a high density display in small font which the consumers find hard to see.

[0005] To overcome the above problems, it has been suggested to place products in labelled boxes. A particular problem with this type of storage, however, is that it is difficult to know when the product is out of stock in the service area. That is, when a product is requested by a customer, the cashier or shop keeper is required to open the appropriate box to see if any of that product is in stock. This is time consuming, inconvenient during service and ultimately expensive for the shop keeper.

[0006] Accordingly, there is a need for a device which can provide a clear identification of a product without inhibiting the ability to stack the product efficiently or preventing the shop keeper from identifying when the product is out of stock.

[0007] FR-8-2899007 discloses a device for displaying information, the device comprising a support member and display member.

[0008] According to an aspect of the present invention there is provided a device for displaying information to a consumer adapted to be arranged adjacent to a product area for receiving one or more products, the device comprising: a support member; and a display member comprising a first display surface, the display member being rotatably mounted on the support member and rotatable between a first position in which the first display surface is viewable in a first direction and a second position in which the first display surface is not viewable in the first direction; wherein the display member is biased towards the second position and the presence of one or more products in the product area can act to retain the display member in the first position; and wherein the product area is disposed on a side of the display member opposite to the first display surface when the display member is in the first position.

[0009] According to the present invention, the first display surface is viewable in a first direction, for example a viewing direction parallel to a shop shelf, only when a product in present in the product area, such as an area on the shelf. When no product is present in the product area, the first display surface is not viewable. The first display surface may provide an indication of product type. Accordingly, a device in accordance with the invention provides a functional and time-effective storage solution whereby both a shop keeper and a consumer can readily identify products present on a store shelf.

[0010] Preferably, the first display surface faces the first direction when the display member is in the first position and the display surface is substantially parallel to the first direction when the display member is in the second position. This arrangement advantageously allows the display surface to move 90 degrees between the first and second positions, preferably from a vertical position (in a direction perpendicular to a horizontal shelf) to a horizontal position (parallel to a horizontal shelf). This provides optimum viewing of the display surface when the product is in stock, ensuring the display surface is hidden to the consumers otherwise.

[0011] Preferably, the device further comprises a second display surface, wherein the second display surface is not viewable in the first direction when the display member is in the first position, and wherein the second display surface is viewable in the first direction when the display member is in the second position.

[0012] The second display surface may be disposed on the support member or on the display member.

[0013] Advantageously, the second display surface is viewable to a consumer or shop keeper only when no product is present in the product area. When a product is present in the product area, the second display surface is not viewable. The second display service may provide an indication that the product is out of stock. This enables a shop keeper to maintain product stocks easily providing a time-effective and more profitable storage solution in comparison with existing solutions.

[0014] Preferably, the display member obscures the second display surface from view in the first direction when in the first position. In this way, the single action of rotation of the display member from the first position can be used both to reveal the second display surface and to remove the first display surface from view.

[0015] The display member may further comprise a counterweight to bias the display member towards the second position. Advantageously, using the counterweight ensures that the display member is brought to the second position swiftly, under the force of gravity. Alternatively, a resilient member such as a spring may be used to resiliently bias the display member towards the second position.

[0016] Preferably, the support member comprises fixing means suitable for mounting the device onto a shelf to prevent movement. For example, an adhesive strip may be used to easily mount the device onto the shelf. Alternative or additional means for fixing mounting the device on to a shelf may also be provided.

[0017] The device according to the present invention is low cost and easy to implement, therefore retailers can easily afford to install them in stores.

[0018] Preferred embodiment of the present invention will now be described, by way of example only, with reference to the accompanying drawings, in which:

Figure 1A shows a schematic side view of a device according to the present invention wherein the display member is in a first position;
Figure 1B shows a schematic side view of a device according to the present invention wherein the display member is in a second position;
Figure 2A shows a device according to the present invention in use, wherein the display member is in a first position;
Figure 2A shows the device of Figure 2A, wherein the display member is in a second position;
Figure 3A shows another device according the present invention in use, further comprising, wherein the display member is in the first position;
Figure 3B shows the device of Figure 3A, wherein the display member is in the second position;
Figure 4A shows a further device according to the present invention in use, wherein the display member is in the first position; and
Figure 4B shows the device of Figure 4A, wherein the display member is in the second position.

[0019] Figures 1A, 1B, 2A and 2B show a device in accordance to a first preferred embodiment of the present invention. Figures 1A and 1B show a side view of the device, while Figures 2A and 2B show the device from the front, i.e. from the "first direction" labelled in Figures 1A and 1B

[0020] The device comprises a support member 1 and a display member 2. The display member 2 is rotatably mounted to the support member 1 by means of a hinge mechanism 3. The hinge mechanism 3 allows the display member 2 to rotate relative to the support member 1, between a first position, as shown in Figures 1A and 2A, and a second position, as shown in Figures 1B and 2B. The support member 2 rotates approximately 90 degrees between the first and second positions.

[0021] The display member 2 comprises a first display surface 4. As can be seen from Figures 1A and 2A, the first display surface 4 is viewable from the first direction when the display member 2 is in the first position. Moreover, as can be seen from Figures 1B and 2B, the first display surface 4 is not viewable from the first direction when the display member 2 is in the second position.

[0022] The first display surface 4 may provide an indication of product type or provide an advertising surface. Preferably, the first direction is parallel to a shop shelf (as illustrated in Figures 3 and 4), and as such the first direction represents a customer's typical view of the device.

[0023] A product area 5 is provided behind the display member 2 to receive one or more products when the display member 2 is in the first position. In this context, "behind" means on the opposite side of the display member 2 to the first display surface 4. Placing products in the product area when the display member 2 is in the first position can prevent the display member 2 rotating to the second position. In particular, because the display member 2 comprises a substantial part which extends above the rotational axis formed by the hinge mechanism 3 when the display member 2 is in the first direction, the presence of products in the product area 5 prevents movement of the display member 2 from the first position to the second position.

[0024] The device further comprises biasing means to bias the display member 2 towards the second position. In the first preferred embodiment, the biasing means is a counterweight 6. The skilled person will recognise that alternative or additional means, such as a spring mechanism or the like, may be employed to bias the display member 2 towards the second position. As the display member 2 is biased towards the second position, it will only remain in the first position if one or more products are in the product area 5. Accordingly, the first display surface 4 will only be viewable in the first direction if one or more products are in the product area 5.

[0025] The device of the first preferred embodiment also comprises a second display surface 7 (as shown in Figure 2B). In the first preferred embodiment, the second display surface is provided on the support member 1. As shown in the Figures, the second display surface 7 is obscured by the display member 2 in the first direction when the display member 2 is in the first position. When the display member 2 is in the second position, the second display surface 7 is not obscured by the display member 2. As such, the second display surface 7 is viewable when the display member 2 is in the second position but is not viewable when the display member 2 is in the first position. As explained above, the display member 2 may only move to the second position when there are no products in the product area 5. The second display surface 7 may include an appropriate sign, such as "out of stock" to indicate that no products are present in the product area 5.

[0026] The device comprises means for fixing the support member 1 to a surface, such as a shop self. For example, the device may be fixed to the surface by gluing or screwing the support member 1 to the top or a side of a shelf to prevent movement. It will be appreciated that any suitable fixing means may be used to ensure that the device is secured on the shelf, including tack, double sided tape, adhesive strips, magnets or Velcro.

[0027] The support member 1 has a tipped portion 8, forming an angle with the shelf when the support member 1 is fixed to the shelf. It is usual for the shelf to be provided with a rail fixed on the shelf for separating storage lines. The tipped portion 8 may be positioned above the rail, enabling the device to be fixed to the shelf close to the rail, while the remaining portion of the support member

is laid flat on the shelf. The tipped portion 8 may be fixed to the rail to increase to further secure the device on the shelf.

[0028] The support member 1 and the display member 2 may be formed of any appropriate material or combination of materials, such as, for example, metals or plastics. In preferred examples, the display member 2 is a board of at least 2 mm thick and/or the display surface 3 has an area at least 40 cm^2. The support member 1 is of sufficient dimensions and characteristics as to support the display member 2. The skilled person will recognise that the size and shape of the device may be varied according to requirements, such as the size and/or shape of the products that are to be received in the product area 6.

[0029] Figures 3A and 3B show the device according to the first preferred embodiment of the present invention in use, wherein the display member 2 is in a first position and second position, respectively. In this embodiment, the support member 1 is connected to the side of shelf 10, on which several products 11 are stacked. For ease of explanation, certain features of the device are omitted from Figures 3A and 3B in order to more clearly show the principles behind the operation of the invention.

[0030] As can be seen in Figure 3A, the presence of one or more products 11 acts to retain the display member 2 in the first position. Accordingly, the first display surface 4 is viewable to a customer in the first direction. As explained above, the first display surface 4 may provide an indication of product type which can be easily recognised by the customer. Accordingly, while the products 11 are efficiently stacked, sufficient information is still provided to the customer for a purchase to be made.

[0031] When the products 11 are removed (for example, if all products 11 have been sold) the display member 2 moves to the second position due to the biasing in the device. This is illustrated in Figure 3B. The first display surface 4 is no longer viewable in the first direction, and thus the customer will not be misled into asking for a product which is out of stock. Instead, the second display surface 7 is viewable in the first direction. The second display surface 7 may provide an indication that a certain product is out of stock, allowing the proprietor of the shop to quickly recognise which products 11 must be restocked.

[0032] Figures 4A and 4B show a device according to a second preferred embodiment of the present invention in use, wherein the display member 2 is in a first position and second position, respectively. In describing the second preferred embodiment, like reference numerals refer to like features as compared to the first preferred embodiment.

[0033] In contrast to the first embodiment, in the second preferred embodiment the second display surface 7 is provided on an extension of the display member 2. When the display member 2 is in the first position (as shown in Figure 4A) the second display surface 7 is disposed beneath the product area 5. The second display surface 7 therefore lies behind and is obscured in the first direction by the display member 2 when the display member 2 is in the first position. On the other hand, the first display surface 4 is viewable in the first direction when the display member 2 is in the first position. When the products 11 are in place, the display member 2 is prevented from moving to the second position by their presence on top of the second display surface 7.

[0034] When no products are in place, the display member 2 moves to the second position, as illustrate in Figure 4B. In the second position, the second display surface 7 is viewable in the first direction, while the first display surface 4 is not.

[0035] It will be appreciated that the present invention may be used to store many types of products, being particularly suitable for stores where the products are held in the service areas, where products are not directly accessible to consumers. Products stored in convenience stores as well as tobacco stores are particularly suitable.

Claims

1. A device for displaying information to a consumer adapted to be arranged adjacent to a product area for receiving one or more products, the device comprising:

   a support member (1); and
   a display member (2) comprising a first display surface (4), the display member being rotatably mounted on the support member and rotatable between a first position in which the first display surface is viewable in a first direction and a second position in which the first display surface is not viewable in the first direction;
   characterized in that the display member is biased towards the second position and the presence of one or more products (11) in the product area (10) can act to retain the display member in the first position; and wherein the product area is disposed on a side of the display member opposite to the first display surface when the display member is in the first position.

2. A device according to claim 1, wherein the first display surface (4) faces the first direction when the display member (2) is in the first position and the display surface is substantially parallel to the first direction when the display member is in the second position.

3. A device according to claim 1 or claim 2, further comprising a second display surface (7), wherein the second display surface is not viewable in the first direction when the display member (2) is in the first position, and wherein the second display surface is viewable in the first direction when the display member

is in the second position.

4. A device according to claim 3, wherein the display member (2) obscures the second display surface (7) from view in the first direction when in the first position.

5. A device according to claim 3 or claim 4, wherein the second display surface (7) is disposed on the support member (1).

6. A device according to any one of claims 3 and 4 wherein the second display surface (7) is disposed on the display member (2).

7. A device according to any one of the preceding claims, wherein the display member (2) further comprises a counterweight (6) to bias the display member towards the second position.

8. A device according to any one of the preceding claims, further comprising a resilient member to resiliently bias the display member (2) towards the second position.

9. A device according to any preceding claim, wherein the support member (1) comprises fixing means suitable for mounting the device onto a shelf.

10. A device according to claim 9, wherein the fixing means is an adhesive strip.

11. A device according to any one of the preceding claims, wherein the first display surface (4) provides an indication of product type.

Patentansprüche

1. Vorrichtung zum Anzeigen von Informationen für einen Verbraucher, die ausgeführt ist, um neben einem Produktbereich zur Aufnahme von einem oder mehreren Produkten angeordnet zu werden, wobei die Vorrichtung Folgendes aufweist:

   ein Trägerelement (1) und
   ein Anzeigeelement (2), das eine erste Anzeigefläche (4) aufweist, wobei das Anzeigeelement drehbar an dem Trägerelement montiert ist und zwischen einer ersten Stellung, in der die erste Anzeigeoberfläche in einer ersten Richtung anschaubar ist, und einer zweiten Stellung, in der die erste Anzeigeoberfläche in der ersten Richtung nicht anschaubar ist, drehbar ist,
   dadurch gekennzeichnet, dass das Anzeigeelement in Richtung auf die zweite Stellung vorgespannt ist und die Anwesenheit von einem oder mehreren Produkten (11) in dem Produktbereich (10) das Halten des Anzeigeelements in der ersten Stellung bewirken kann, und wobei der Produktbereich auf einer Seite des Anzeigeelements angeordnet ist, die der ersten Anzeigefläche entgegengesetzt ist, wenn das Anzeigeelement in der ersten Stellung ist.

2. Vorrichtung nach Anspruch 1, wobei die erste Anzeigefläche (4) der ersten Richtung zugekehrt ist, wenn das Anzeigeelement (2) in der ersten Stellung ist, und die Anzeigefläche im Wesentlichen parallel zu der ersten Richtung ist, wenn das Anzeigeelement in der zweiten Stellung ist.

3. Vorrichtung nach Anspruch 1 oder Anspruch 2, die ferner eine zweite Anzeigefläche (7) aufweist, wobei die zweite Anzeigefläche in der ersten Richtung nicht anschaubar ist, wenn das Anzeigeelement (2) in der ersten Stellung ist, und wobei die zweite Anzeigefläche in der ersten Richtung anschaubar ist, wenn das Anzeigeelement in der zweiten Stellung ist.

4. Vorrichtung nach Anspruch 3, wobei das Anzeigeelement (2) die Sicht auf die zweite Anzeigefläche (7) in der ersten Richtung verdeckt, wenn es in der ersten Stellung ist.

5. Vorrichtung nach Anspruch 3 oder Anspruch 4, wobei die zweite Anzeigefläche (7) an dem Trägerelement (1) angeordnet ist.

6. Vorrichtung nach einem der Ansprüche 3 und 4, wobei die zweite Anzeigefläche (7) an dem Anzeigeelement (2) angeordnet ist.

7. Vorrichtung nach einem der vorhergehenden Ansprüche, wobei das Anzeigeelement (2) ferner ein Gegengewicht (6) aufweist, um das Anzeigeelement in Richtung auf die zweite Stellung vorzuspannen.

8. Vorrichtung nach einem der vorhergehenden Ansprüche, die ferner ein federndes Element zum federnden Vorspannen des Anzeigeelements (2) in Richtung auf die zweite Stellung aufweist.

9. Vorrichtung nach einem der vorhergehenden Ansprüche, wobei das Trägerelement (1) ein Befestigungsmittel aufweist, das zum Montieren der Vorrichtung auf einem Regal geeignet ist.

10. Vorrichtung nach Anspruch 9, wobei das Fixiermittel ein Klebstreifen ist.

11. Vorrichtung nach einem der vorhergehenden Ansprüche, wobei die erste Anzeigefläche (4) eine Produkttypangabe bereitstellt.

Revendications

1. Dispositif servant à afficher l'information pour un utilisateur, et adapté de manière à être placé près d'une zone de produits en vue de recevoir un ou plusieurs produits, le dispositif comportant:

   un élément de support (1); et
   un élément d'affichage (2) qui comprend une première surface d'affichage (4), l'élément d'affichage étant monté sur l'élément de support et pouvant pivoter entre une première position, dans laquelle la première surface d'affichage est observable dans une première direction, et une deuxième position dans laquelle la première surface d'affichage n'est pas observable dans une première direction;
   caractérisé en ce que l'élément d'affichage est orientée systématiquement vers la deuxième position, et la présence d'un ou de plusieurs produits (11) dans la zone de produits (10) peut avoir pour effet de retenir l'élément d'affichage dans la première position; et **caractérisé en ce que** la zone de produits est disposée sur un côté de l'élément d'affichage vis-à-vis de la première surface d'affichage lorsque l'élément d'affichage se trouve dans la première position.

2. Dispositif selon la revendication 1, **caractérisé en ce que** la première surface d'affichage (4) fait face à la première direction lorsque l'élément d'affichage (2) se trouve dans la première position, et **en ce que** la surface d'affichage est essentiellement parallèle à la première direction lorsque l'élément d'affichage se trouve dans la deuxième position.

3. Dispositif selon la revendication 1 ou la revendication 2, comportant par ailleurs une deuxième surface d'affichage (7), **caractérisé en ce que** la deuxième surface d'affichage n'est pas observable dans la première direction lorsque l'élément d'affichage (2) se trouve dans la première position, et **caractérisé en ce que** la deuxième surface d'affichage est observable dans la première direction lorsque l'élément d'affichage se trouve dans la deuxième position.

4. Dispositif selon la revendication 3, **caractérisé en ce que** l'élément d'affichage (2) empêche la deuxième surface d'affichage (7) d'être observable dans la première direction lorsqu'il se trouve dans la première position.

5. Dispositif selon la revendication 3 ou la revendication 4, **caractérisé en ce que** la deuxième surface d'affichage (7) est disposée sur l'élément de suport (1).

6. Dispositif selon l'une quelconque des revendications 3 et 4, **caractérisé en ce que** la deuxième surface d'affichage (7) est disposée sur l'élément d'affichage (2).

7. Dispositif selon l'une quelconque des revendications précédentes, **caractérisé en ce que** l'élément d'affichage (2) comporte par ailleurs un contrepoids (6) pour orienter systématiquement l'élément d'affichage vers la deuxième position.

8. Dispositif selon l'une quelconque des revendications précédentes, comportant par ailleurs un élément résilient qui pour effet d'orienter systématiquement et avec résilience l'élément d'affichage (2) vers la deuxième position.

9. Dispositif selon l'une quelconque des revendications précédentes" **caractérisé en ce que** l'élément de support (1) comporte un moyen de fixation servant à installer le dispositif sur une étagère.

10. Dispositif selon la revendication 9, **caractérisé en ce que** le moyen de fixation est une bande adhésive.

11. Dispositif selon l'une quelconque des revendications précédentes, **caractérisé en ce que** la surface d'affichage (4) fournit une indication sur le type de produit.

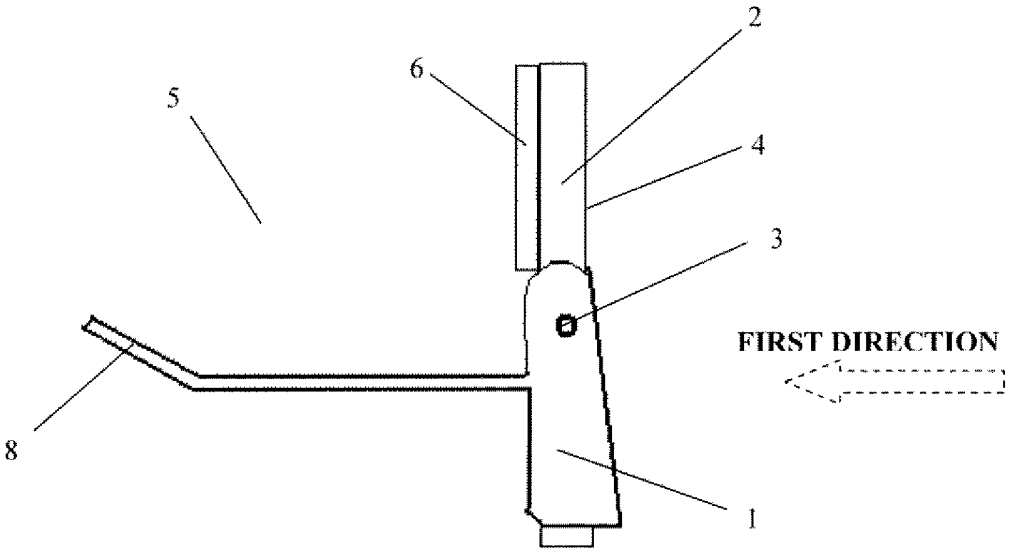


FIGURE 1A

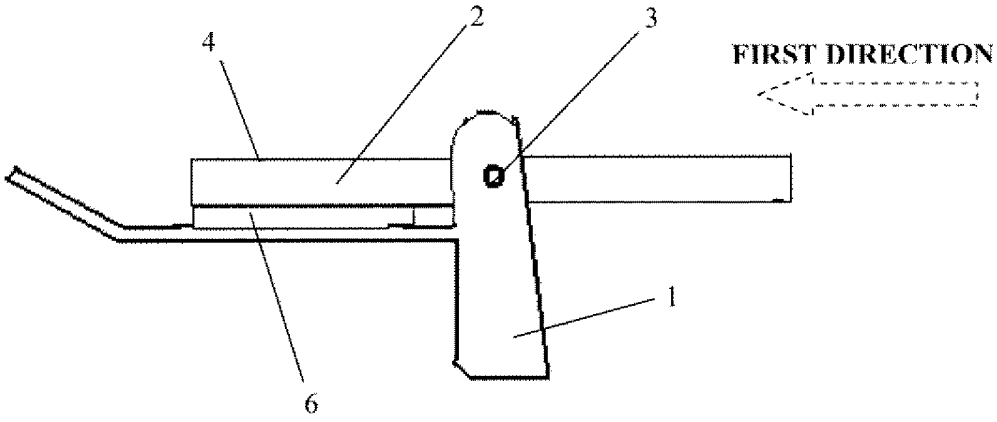


FIGURE 1B

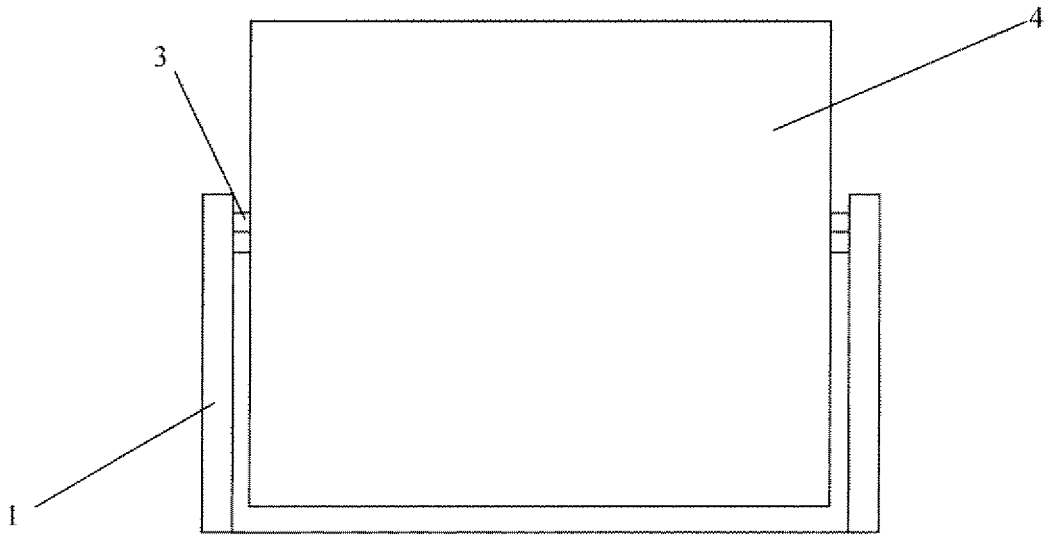


Figure 2A

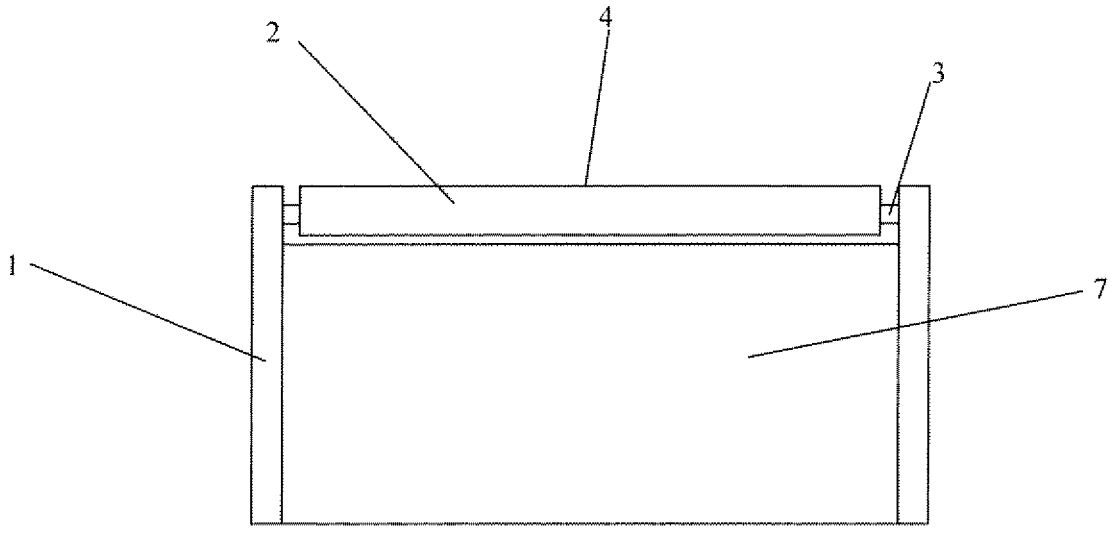


Figure 2B

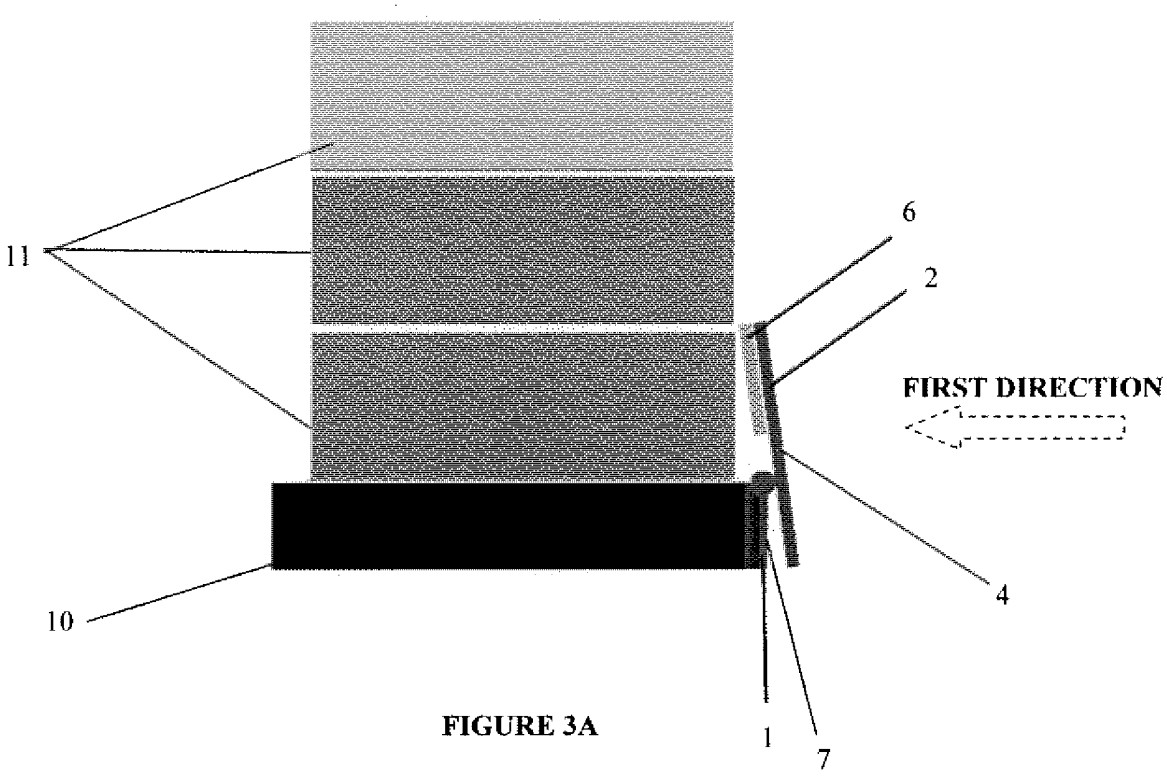


FIGURE 3A

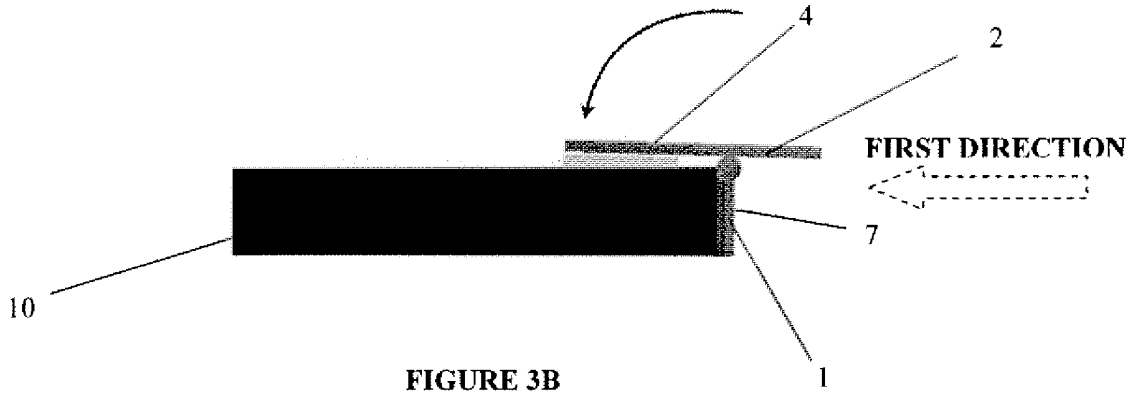


FIGURE 3B

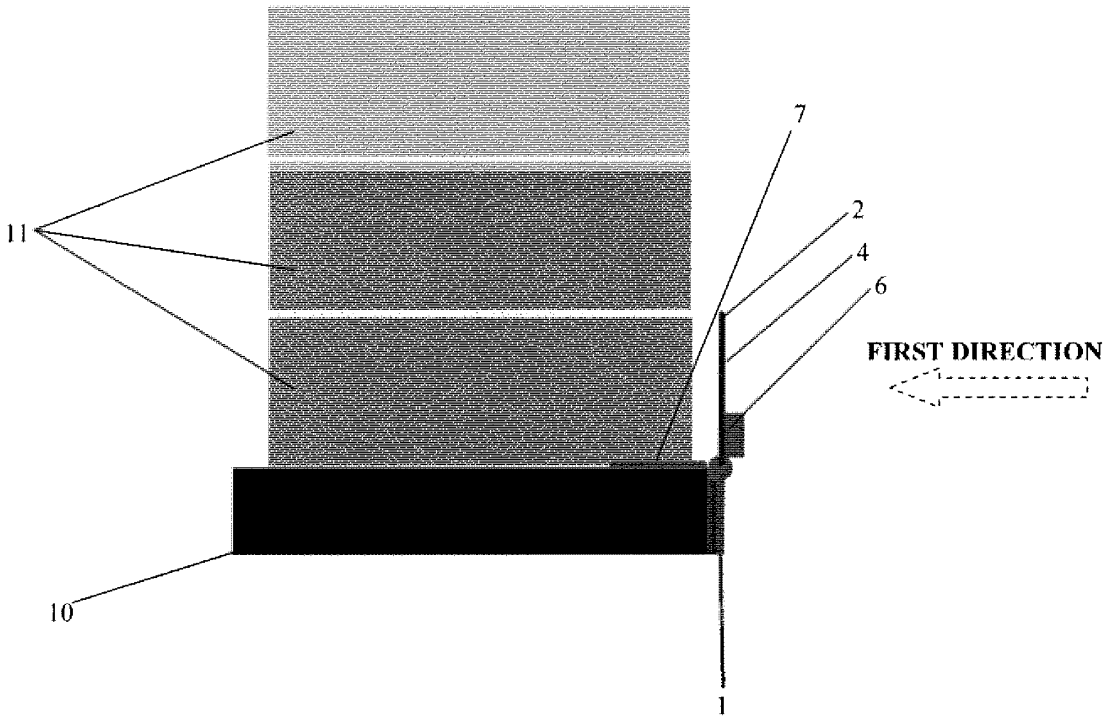


FIGURE 4A

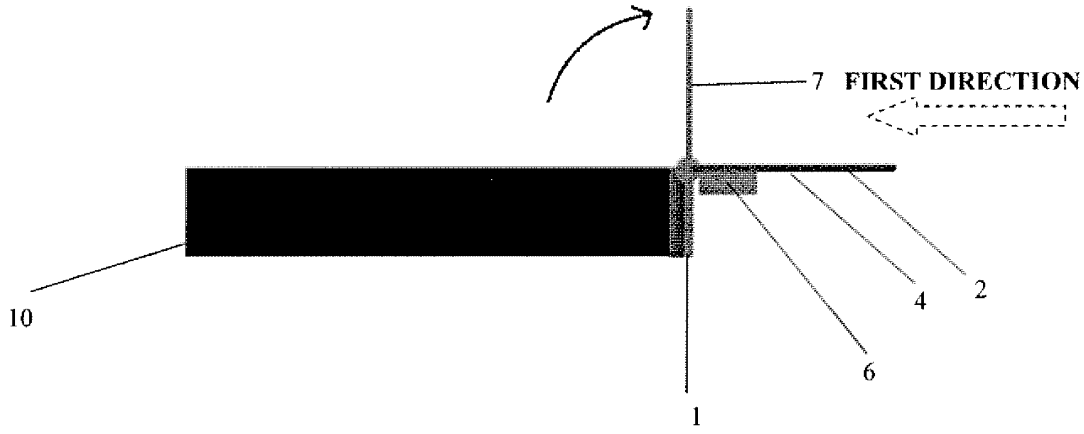


FIGURE 4B

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- FR 82899007 **[0007]**