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(54) **SYSTEM FOR HOLDING VISUAL LABELS**

(57) According to an example aspect of the present invention, there is provided a system for holding visual labels (16) in optional positions along the front edge of a shelf. The system comprises a profiled strip (1) with a mounting element (2) configured to enable attachment to the front edge of a shelf, and an attachment element (9) configured for detachable fixing of a holder for a visual label and a holder for a visual label (16) comprising gripping parts (15) configured for attachment to the attachment element (9) of the profiled strip (1). The mounting element (2) of the profiled strip (1) and the attaching element (9) of the profiled strip (1) are connected by a hinge (10).

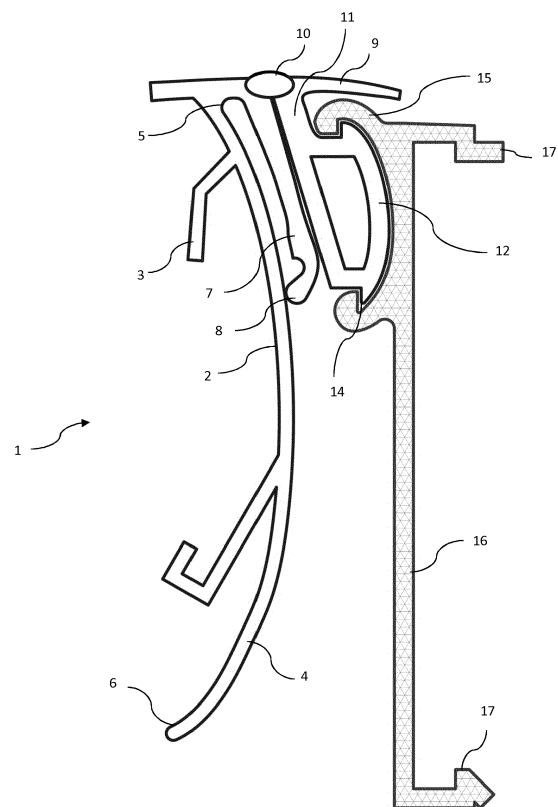


Fig. 3

## Description

### FIELD

**[0001]** The invention relates to providing a system for holding visual labels such as information carrying labels, programmable label tags and/or attention flags in optional positions along the front edge of a shelf or equivalent structure in a shop, department store, warehouse or similar.

### BACKGROUND

**[0002]** In shops, department stores and the like, where goods and products are kept and displayed on shelves, inter alia price and goods information is usually indicated on labels which are arranged on the shelf front edge or equivalent.

**[0003]** These labels and the holders therefor are very striking and have a strong influence on the impression that a customer forms of the shop and the goods display on the shelves. The design of label holder systems is therefore of major importance.

**[0004]** The total space in a shop is determined by the size of the premises and usually represents a limited resource which has to be utilized optimally. This means inter alia that efforts are constantly being made to reduce the thickness of shelves and to position these at an increasingly small mutual spacing in the vertical direction in order to increase the useful goods display space. This makes even greater demands on the label holder system used. Labels and holders which project down below the shelf level encroach on the shelf space below and render the putting-in and removal of goods difficult.

**[0005]** A common type of label system for shop shelves comprises a profiled strip made of plastic which is arranged on the front edge of the shelf, extends along the entire length of the shelf and is made with a front pocket for receiving in a protected manner the necessary number of price tag labels. An example of such a strip is disclosed in WO99/52092 and FR-A-2726679. Such strips can also be made in two parts, the pocket consisting of or being formed by a separate part, see for example US-A 5,263,269.

**[0006]** Further examples of label carrying or label holding systems are described, for example, in WO 92/20056 and EP 1 277 191.

### SUMMARY OF THE INVENTION

**[0007]** The invention is defined by the features of the independent claims. Some specific embodiments are defined in the dependent claims.

**[0008]** According to a first aspect of the present invention, there is provided a system for holding visual labels in optional positions along the front edge of a shelf, comprising a profiled strip with a mounting element configured to enable attachment to the front edge of a shelf

and an attachment element configured for detachable fixing of a holder for a visual label and a holder for the visual label comprising gripping parts configured for attachment to the attachment element of the profiled strip wherein the mounting element of the profiled strip and the attaching element of the profiled strip are connected by a hinge.

**[0009]** According to a second aspect of the present invention, there is provided a profiled strip with a mounting element configured to enable attachment to the front edge of a shelf and an attachment element configured for detachable fixing of a holder for a visual label wherein the mounting element of the profiled strip and the attaching element of the profiled strip are connected by a hinge.

**[0010]** According to a third aspect of the invention, the profiled strip has a longitudinal axis and a length along the longitudinal axis and the hinge is continuous over the length of the profiled strip.

**[0011]** According to a fourth aspect of the invention, the hinge is of same material as the mounting element and the attachment element.

**[0012]** According to a fifth aspect of the invention, the hinge is of different material than the mounting element and the attachment element.

**[0013]** According to a sixth aspect of the invention, the holder for the visual label is shorter in the direction of the longitudinal axis of the profiled strip than the length of the profiled strip.

**[0014]** According to a seventh aspect of the invention, the holder for the visual label comprises opposing spaced apart holding hooks for gripping a visual label, preferably a programmable label tag.

**[0015]** According to an eighth aspect of the invention, the mounting element of the profiled strip comprises opposing spaced apart hooks for gripping an edge of a shelf.

**[0016]** According to a ninth aspect of the invention the mounting element of the profiled strip comprises a contact surface for adhesive tape and adhesive tape.

**[0017]** According to a tenth aspect of the invention, the mounting element of the profiled strip comprises a front surface having a first edge and a second edge, both extending parallel to the longitudinal axis of the profiled strip and the hinge is connected to the first edge of the front surface and a holding tongue extending from the first edge of the front surface over said front surface and having a contact edge that is in contact with the front surface.

**[0018]** According to an eleventh aspect of the invention, the holding tongue extends continuously over the length of the front surface.

**[0019]** According to a twelfth aspect of the invention, the contact edge of the holding tongue is covered with frictional material.

### BRIEF DESCRIPTION OF THE DRAWINGS

**[0020]**

FIGURE 1 illustrates the system in accordance with

at least some embodiments of the present invention with a programmable label tag attached;

FIGURE 2 illustrates the system of FIGURE 1 the programmable label tag detached;

FIGURE 3 is an end view of the system of FIGURES 1 and 2; and

FIGURE 4 illustrates a profiled strip in accordance with at least some embodiments of the invention.

## EMBODIMENTS

## DEFINITIONS

**[0021]** In the present context, the term "shelf" comprises planar surfaces for storing and display of goods and having an edge.

**[0022]** A visual label includes but is not limited to printed labels, programmable label tags and attention flags. In general, a visual label is a device for displaying a visible message, for example text, numbers, pictures or other figures.

**[0023]** A hinge is a device allowing one part to turn in relation to another part.

**[0024]** A programmable tag is a device including at least one display for showing information and means for altering the shown information as needed.

**[0025]** The invention relates to displaying and conveying information on goods placed on shelves. This information may include description of the goods and prices or figures and colours for drawing attention to particular goods. Such devices are used in stores, warehouses storages and department stores. The system in its various embodiments comprises a connecting device that is attached to an edge of a shelf and a carrying or holding device for holding visual label. The location of the visual label in relation of the longitudinal axis of the holding device can be altered in order to place the visual label on a desired point. The system further enables adding attention flags for emphasizing displayed information or goods placed on shelves.

**[0026]** FIGURE 1 illustrates a system in accordance with at least some embodiments of the present invention. The body of the invention is a profiled strip 1. This strip is usually dimensioned to extend over the width of the exposed edge of a shelf. The profiled strip 1 is preferably designed to provide a neat and finished look for the edge of the shelf. The profiled strip includes a mounting element 2 that has means for providing attachment to the edge of the shelf. In this example the mounting means is two opposing spaced apart hooks 3. These opposing hooks 3 extend over the length of the profiled strip 1 and are dimensioned to grip attachment parts of a shelf. As the edges of the shelves used widely in stores include more or less standardized or established type of attachment parts, the hooks can be made to correspond to that type

of attachment. The hook type shown in figures 1 and 2 illustrates one common attachment type used. Of course, the hooks or other attachment can be configured to correspond with any type of attachment provided on the edge of a shelf. As the profiled strip 1 may be manufactured by extrusion, the hooks extend over the whole length of the profiled strip. However, if desired, a series of narrow hooks or other attachment means can be used, if desired.

**[0027]** The mounting element 2 of the profiled strip 1 comprises a front surface 4 having a first edge 5 and a second edge 6, both extending parallel to the longitudinal axis of the profiled strip. The front surface 4 forms most of the visible part of the profiled strip and provides a finished look over the edge of the shelf and may be dimensioned to cover the edge of the shelf for this purpose. A holding tongue 7 extends from the first edge 5 of the front surface 4 over said front surface 4. The holding tongue 7 extends first away from the front surface 4 and then turns over the front surface 4 so that a small gap is formed between the front surface 4 and the holding tongue 7. The holding tongue 7 ends to a contact edge 8. The contact edge 8 turns towards the front surface 4 and is in contact with the front surface 4. It can be contemplated that the contact surface and the front surface have a small gap therebetween. This holding tongue 7 is also continuous over the length of the profiled strip 1 for ease of manufacture, but one can contemplate that also this part can be made of discontinued shorter sections. The contact edge 8 can be coated with a frictional material such as rubber, foamed plastic or any frictional coating material. The front surface 4 can be coated as well for the same purpose.

**[0028]** The purpose of this holding tongue 7 is to provide a gripper for holding lightweight display materials such as attention flags made of paper, cardboard or thin plastics, for example. Such attention flags may be simple coloured pieces that are placed to draw attention to specific goods or special offer. Of course, price tags or any other information that can be displayed on a simple lightweight piece can be held by the holding tongue 7. The holding tongue 7 functions simply by pushing an edge of a piece of material between the holding tongue 7 and the front surface 4. The pressure between the contact edge 8 and the front surface 4 and possible increased friction obtained by coating keeps the object pushed under the holding tongue in place. The only limiting factor of what kind of visual label can be held by the holding tongue is the limited holding power. If the contact between the contact edge 8 and the front surface is increased, the holding power understandably increases, but then pushing items between the contact edge 8 and the front surface needs more force. Further, it can be contemplated that the holding tongue is designed to provide a mechanical snap-on lock for a display that is held by the holding tongue.

**[0029]** The mounting element 2 of the profile strip 1 and the attaching element 9 of the profiled strip 1 are connected by a hinge 10. The attaching element 9 com-

prises a body 11 and a locking profile 12 for fixing a holder for the visual label 13. The locking profile is a curved surface having gripping edges 14 extending from the body 11 on the sides of the locking profile 12. The holder for the visual label 13 has gripping hooks 15 that correspond to the shape of the locking profile 12 and attach to the edges 14 of the locking profile. The holder for the visual label 13 can be attached to any position desired along the length of the profile strip 1 by using the gripping hooks 15. The gripping hooks 15 and the locking profile provide an easily attachable and detachable connection with sufficient load ability to carry even heavier visual labels, for example a programmable visual label 20 shown in figure 1. Such a programmable display has a display itself and means for changing the information displayed and battery for providing energy. The information that is shown can be usually controlled remotely. These kinds of displays are quite lightweight, but considerably heavier than paper, plastic or cardboard tags used commonly. Thus, the structure of the holder for the visual label 13 and the profiled strip 1 has to be sturdy enough to carry the increased load. Even if one display doesn't weigh much, one may need several of such displays along an edge of a shelf, whereby the combined load can be considerable. The holder for the visual label 13 comprises in this embodiment a flat back plate 16 that has opposing holding hooks 17 spaced apart for gripping a visual label or display 13, preferably a programmable display tag described above. The holder for the visual label is usually shorter in the direction of the longitudinal axis of the profiled strip than the length of the profiled strip so that it can be placed on a desired location.

**[0030]** The mounting element 2 and the attachment element 9 are connected by a hinge 10. The hinge 10 is connected to the first edge of the front surface 4 and to an edge of the body 11 of the attachment element 9. The purpose of this hinge 10 is to allow turning of the attachment element 9 and the holder for the visual label 13 attached thereto upwards when a contact is made with the holder of the visual label 13 or the visual label or programmable visual display 20. This facilitates unloading goods from the shelves and prevents accidental removal of the programmable visual displays or holders for the visual labels. A hinge 10 that is placed between the mounting element and the attachment element provides good load carrying capacity and reliability even over a long period of use. The load carrying capacity is needed as the load is increased by use of programmable displays or any visual label that has flexible functions, as these are heavier than paper labels.

**[0031]** FIGURE 2 illustrate the system of figures 1 and 2 at the end of the profile strip 1. The profile strip 1 can be made of various materials. One family of materials are PVC based polymers. The properties of these polymers can be widely adjusted for different uses. The mounting element and attachment element may be made of same or different material as well as the hinge. However, the hinge part may be provided by dimensioning

the part so that it is sufficiently flexible or making the part of material that provides the required flexibility and durability. The holder for visual label is preferably made of clear polystyrene or polycarbonate. However, these materials are mentioned only as suitable alternatives and the invention is not limited to any specific choice of material.

**[0032]** FIGURE 4 illustrates an example profile strip capable of supporting at least some embodiments of the present invention. In this profile strip the opposing hooks 3 are replaced by a contact surface 18 for adhesive tape and adhesive tape 19. This mounting system enables attaching the profile strip 1 to any flat edge of a shelf.

**[0033]** It is to be understood that the embodiments of the invention disclosed are not limited to the particular structures, process steps, or materials disclosed herein, but are extended to equivalents thereof as would be recognized by those ordinarily skilled in the relevant arts. It should also be understood that terminology employed herein is used for the purpose of describing particular embodiments only and is not intended to be limiting.

**[0034]** Reference throughout this specification to "one embodiment" or "an embodiment" means that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment of the present invention. Thus, appearances of the phrases "in one embodiment" or "in an embodiment" in various places throughout this specification are not necessarily all referring to the same embodiment.

**[0035]** As used herein, a plurality of items, structural elements, compositional elements, and/or materials may be presented in a common list for convenience. However, these lists should be construed as though each member of the list is individually identified as a separate and unique member. Thus, no individual member of such list should be construed as a de facto equivalent of any other member of the same list solely based on their presentation in a common group without indications to the contrary. In addition, various embodiments and example of the present invention may be referred to herein along with alternatives for the various components thereof. It is understood that such embodiments, examples, and alternatives are not to be construed as de facto equivalents of one another, but are to be considered as separate and autonomous representations of the present invention.

**[0036]** Furthermore, the described features, structures, or characteristics may be combined in any suitable manner in one or more embodiments. In the following description, numerous specific details are provided, such as examples of lengths, widths, shapes, etc., to provide a thorough understanding of embodiments of the invention. One skilled in the relevant art will recognize, however, that the invention can be practiced without one or more of the specific details, or with other methods, components, materials, etc. In other instances, well-known structures, materials, or operations are not shown or described in detail to avoid obscuring aspects of the inven-

tion.

**[0037]** While the forgoing examples are illustrative of the principles of the present invention in one or more particular applications, it will be apparent to those of ordinary skill in the art that numerous modifications in form, usage and details of implementation can be made without the exercise of inventive faculty, and without departing from the principles and concepts of the invention. Accordingly, it is not intended that the invention be limited, except as by the claims set forth below.

**[0038]** The verbs "to comprise" and "to include" are used in this document as open limitations that neither exclude nor require the existence of also un-recited features. The features recited in depending claims are mutually freely combinable unless otherwise explicitly stated. Furthermore, it is to be understood that the use of "a" or "an", i.e. a singular form, throughout this document does not exclude a plurality.

#### INDUSTRIAL APPLICABILITY

**[0039]** The invention is suitable for manufacturing commercial displays and utilizing them in shops, department stores and warehouses.

#### REFERENCE SIGNS LIST

##### **[0040]**

- 1 profile strip
- 2 mounting element
- 3 opposing hook
- 4 front surface
- 5 first edge
- 6 second edge
- 7 holding tongue
- 8 contact edge
- 9 attaching element
- 10 hinge
- 11 body
- 12 locking profile
- 13 holder for the visual label
- 14 edge
- 15 gripping hook
- 16 back plate
- 17 holding hooks
- 18 contact surface
- 19 adhesive tape
- 20 visual label

#### CITATION LIST

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**[0041]** WO99/52092, FR-A-2726679, US-A 5,263,269, WO 92/20056, EP 1 277 191

#### Claims

1. A system for holding visual labels (16) in optional positions along the front edge of a shelf, comprising
  - a profiled strip (1) with a mounting element (2) configured to enable attachment to the front edge of a shelf, and an attachment element (9) configured for detachable fixing of a holder for a visual label (16), and
  - a holder (13) for a visual label comprising gripping parts (15) configured for attachment to the attachment element (9) of the profile strip (1)
- wherein the mounting element (2) of the profiled strip (1) and the attaching element (9) of the profiled strip (1) are connected by a hinge (10).
2. A system for holding visual labels according to the claim 1, wherein the profiled strip (1) has a longitudinal axis and a length along the longitudinal axis and the hinge (10) is continuous over the length of the profiled strip (10).
3. A system according to one of the previous claims, wherein the hinge (10) is of the same material as the mounting element (2) and the attachment element (9).
4. A system according to one of the claims 1 and 2, wherein the hinge (10) is of a different material than the mounting element (2) and the attachment element (9).
5. A system according to any of the previous claims, wherein the holder (13) for the visual label (16) is shorter in the direction of the longitudinal axis of the profiled strip (1) than the length of the profiled strip (1).
6. A system according to any of the previous claims, wherein the holder (13) for the visual label (16) comprises opposing holding hooks (17) spaced apart for gripping a visual label, preferably a programmable label tag (20).
7. A system according to any of the previous claims, wherein the mounting element (2) of the profiled strip (1) comprises opposing spaced apart hooks (3) for gripping an edge of a shelf.
8. A system according to any of the previous claims 1 - 6, wherein the mounting element (2) of the profiled strip (1) comprises a contact surface (18) for adhesive tape and adhesive tape (20).
9. A system according to any of the previous claims, wherein the mounting element (2) of the profile strip

- (1) comprises a front surface (4) having a first edge (5) and a second edge (6), both extending parallel to the longitudinal axis of the profiled strip (1) and the hinge (10) being connected to the first edge (5) of the front surface (4), wherein the mounting element (2) comprises a holding tongue (7) extending from the first edge (5) of the front surface (4) partially over said front surface (4) and having a contact edge (8) that is set towards the front surface (4)
10. A system according to the claim 9, wherein the contact edge (8) is in contact with the front surface (4).
11. A system according to any of the claims 9 - 10, wherein the holding tongue (7) extends continuously over the length of the front surface (4).
12. A system according to any of the claims 9 - 11, wherein the contact edge (8) of the holding tongue (7) is covered with frictional material.
13. A profiled strip for a system for holding visual labels, comprising a mounting element (2) configured to enable attachment to the front edge of a shelf and an attachment element (9) configured for detachable fixing of a holder for a visual label (13) wherein the mounting element (2) of the profiled strip (1) and the attaching element (9) of the profiled strip (1) are connected by a hinge (10).
14. A profiled strip according to the claim 13, wherein the mounting element (2) of the profile strip (1) comprises a front surface (4) having a first edge (5) and a second edge (6), both extending parallel to the longitudinal axis of the profiled strip (1) and the hinge (10) being connected to the first edge (5) of the front surface (4), wherein the mounting element (2) comprises a holding tongue (7) extending from the first edge (5) of the front surface (4) partially over said front surface (4) and having a contact edge (8) that is set towards the front surface (4)
15. A profiled strip according to the claim 14, wherein the contact edge (8) is in contact with the front surface (4).
16. A profiled strip according to any of the claims 14 - 15, wherein the holding tongue (7) extends continuously over the length of the front surface (4).
17. A profiled strip according to any of the claims 14 - 16, wherein the contact edge (8) of the holding tongue (7) is covered with frictional material.
18. A profiled strip according to the one of the claims 13 - 17, wherein the profiled strip (1) has a longitudinal axis and a length along the longitudinal axis and the hinge (10) is continuous over the length of the profiled strip (10).
19. A profiled strip according to one of the previous claims, wherein the hinge (10) is of the same material as the mounting element (2) and the attachment element (9).
20. A profiled strip according to one of the claims 13 - 18, wherein the hinge (10) is of a different material than the mounting element (2) and the attachment element (9).
21. A profiled strip according to any of the previous claims 13 - 20, wherein the mounting element (2) of the profiled strip (1) comprises a contact surface (18) for adhesive tape and adhesive tape (20).

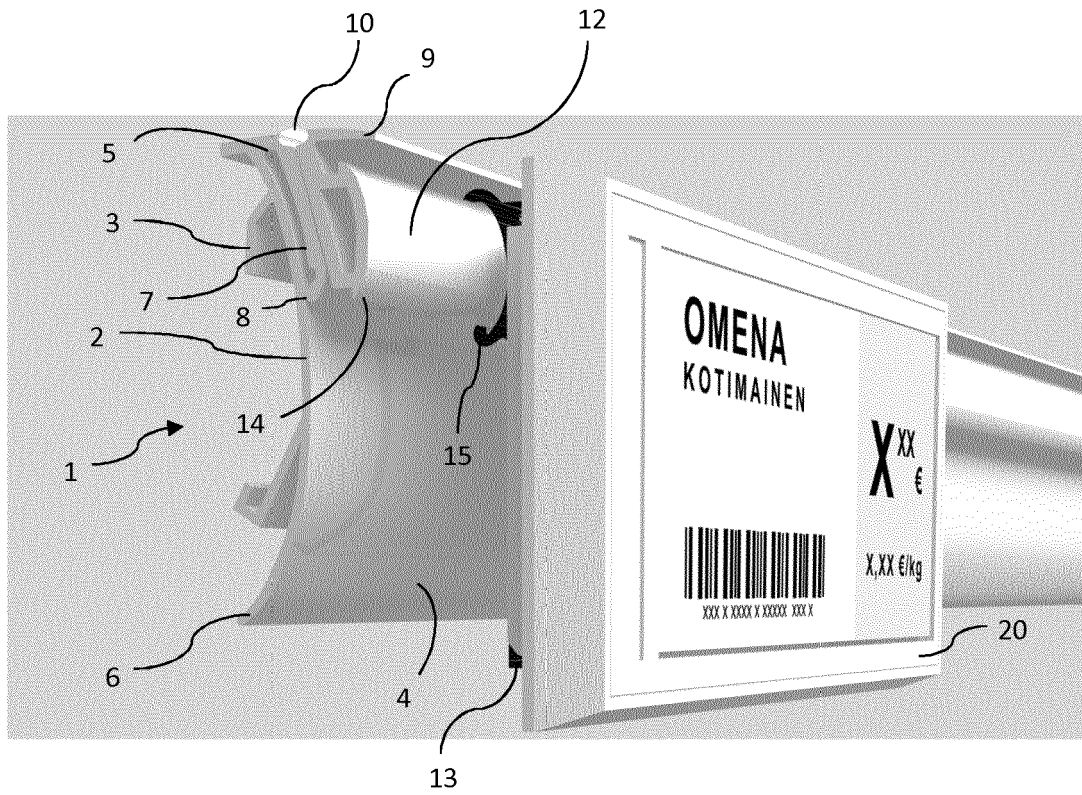


Fig. 1

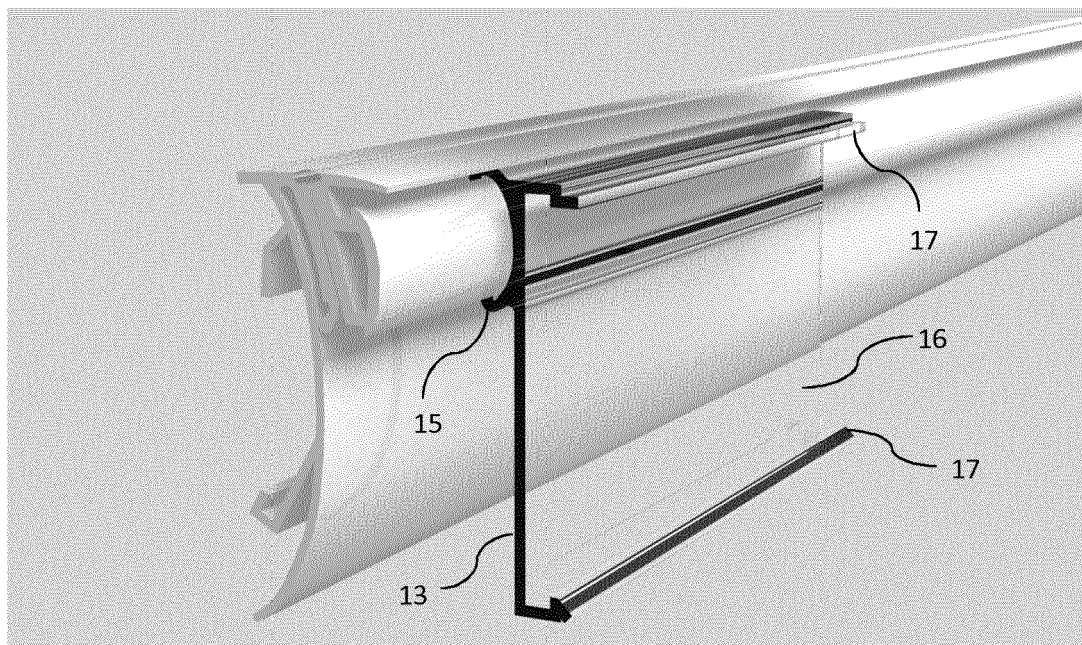


Fig. 2

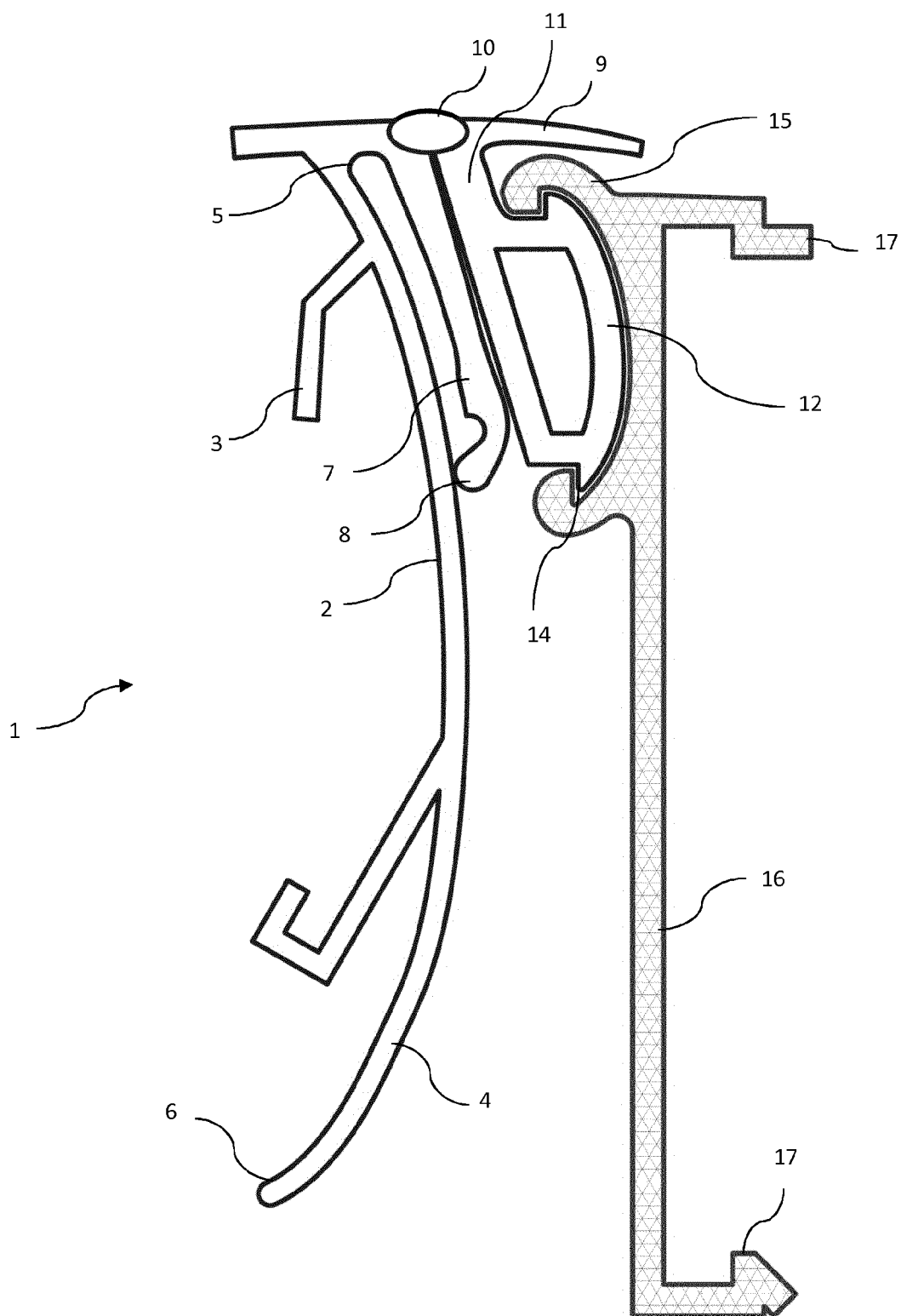


Fig. 3



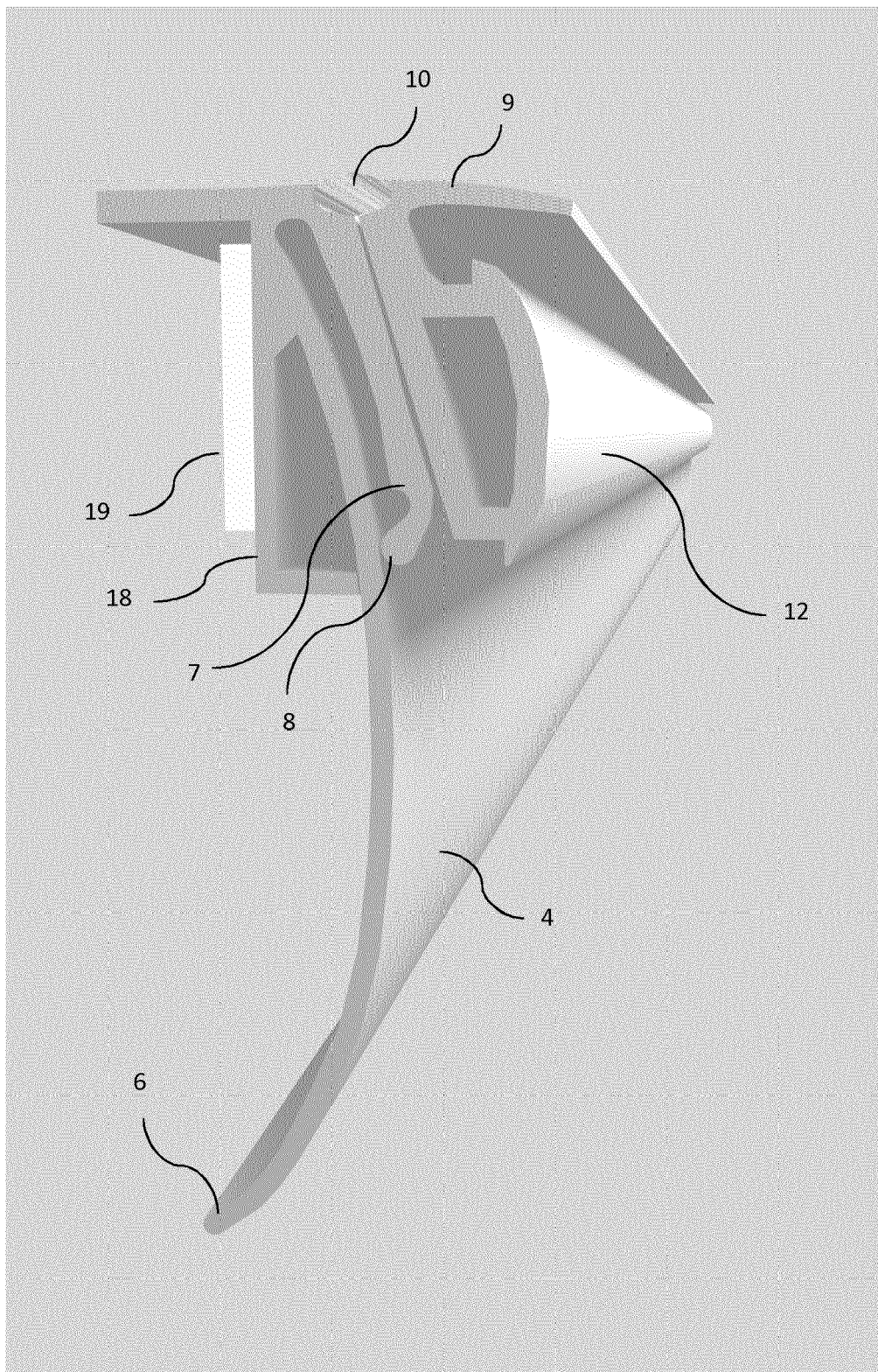


Fig. 4



## EUROPEAN SEARCH REPORT

Application Number  
EP 18 17 3661

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| 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                                                                                                                                                                                                                                                      |                                                                                                                                       |                                                                                                                                                                                                                                                                              |                                            |
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| A                                                                                                                                                                                                                                                      |                                                                                                                                       |                                                                                                                                                                                                                                                                              |                                            |
| The present search report has been drawn up for all claims                                                                                                                                                                                             |                                                                                                                                       |                                                                                                                                                                                                                                                                              |                                            |
| Place of search<br>The Hague                                                                                                                                                                                                                           |                                                                                                                                       | Date of completion of the search<br>14 November 2018                                                                                                                                                                                                                         | Examiner<br>Lechanteux, Alice              |
| CATEGORY OF CITED DOCUMENTS<br>X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document |                                                                                                                                       | T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>& : member of the same patent family, corresponding document |                                            |

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
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14-11-2018

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EPO FORM P0459

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