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(54) **A label holder**

(57) A label holder (1) for attaching an electronic label (4) to a support (5), which support comprises a supporting arm (51) and a cross-piece (52) arranged transversely to the supporting arm. The label holder comprises; a label receiving portion (10), a cross-piece receiving portion (30) arranged to enclose at least a portion of the cross-piece and defining a first pivotal axis about which the label holder is pivotal in relation to the support, and an angle adjusting portion (20), which is movable between at least two different positions and which is arranged to, in at least one of said positions, be supported by the support for maintaining the label holder in a corresponding pivotal angle in relation to the support. The label holder further comprises a hinge (22) by which said angle adjusting portion (20) is pivotally connected to the label receiving portion (10), about a second pivotal axis.

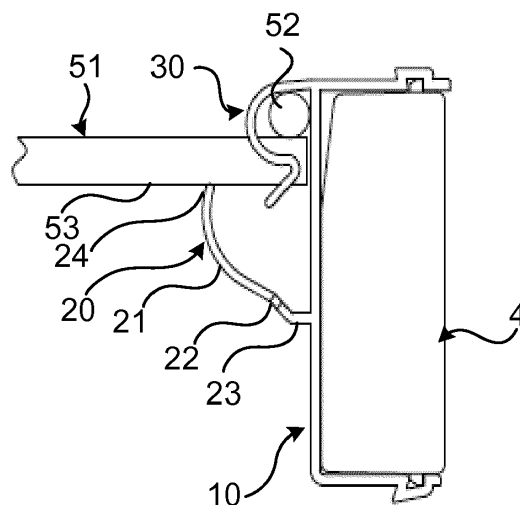


Fig. 5

## Description

### TECHNICAL FIELD

**[0001]** The present invention relates to a label holder for attaching an electronic label to a support, which support comprises a supporting arm and a cross-piece arranged transversely to the supporting arm.

### BACKGROUND

**[0002]** Electronic labels or electronic information displays are used to a greater and greater extent in, for instance, grocery stores, department stores and the like. Such electronic labels may for instance be used in order to indicate information about products which are displayed on pronged racks, for example products arranged in packs threaded onto long, essentially horizontal prongs. The labels typically comprise an LED or LCD screen for visual presentation of the information. The information shown is usually statements about price, cost-per-unit price, product number and possibly product name. Compared with conventional paper labels, the electronic labels have the advantage that it is easy to change and keep the information about the respective product type updated. For instance, this can be made centrally via a store computer, whereby the displays are arranged to communicate with the computer.

**[0003]** When electronic labels are used for presenting information concerning products that are stored and displayed at such prongs, sometimes referred to as peg hooks, the electronic label is normally attached to a label holder. The label holder in turn is attached to a label holder support which may be arranged above the product carrying prong. The support normally comprises a supporting arm which extends in parallel with the prong and which, at its free end facing the customer, is provided with a cross-piece or a cross-bar which extends in the horizontal plane perpendicular to the supporting arm. The label holder is attached to the cross-piece such that the electronic label is suspended from the cross-piece and positioned slightly above the foremost product being suspended from the prong.

**[0004]** The viewing angle of the display units or screens used at electronic labels is normally limited. For allowing good readability of electronic labels attached to supports which are arranged at different heights, it is therefore of great importance to be able to adjust and maintain the vertical angle between the label and the supporting arm. In the following, this angle is referred to as the label angle. For this reason the label holders are normally arranged such that they may be pivoted about the horizontal cross-piece. In order to ensure that the desired label angle is maintained, the label holder and/or the support may be provided with various means for preventing the label holder from being pivoted in either or both rotational directions from the desired angular position.

**[0005]** EP 1 135 761 B1 discloses a label holder which is arranged to be pivotally attached to a cross-piece which is fixed to the free end of a supporting arm of a label holder support. The label holder is provided with a slide which is linearly displaceable in the vertical direction between a retracted position and an extended position. A free end of the slide is arranged to bear against a longitudinal side surface of the supporting arm. When the slide is fully retracted, the label holder may assume a vertical position. When the slide has been partly or fully extended, the free end bears against the supporting arm and prevents the label holder from pivoting from a corresponding label angle, in a direction back to the vertical position.

**[0006]** WO 01/24143 A1 discloses a similar label holder comprising a linearly displaceable slide. At this arrangement however, the slide is arranged to be horizontally displaceable and it exhibits a number of supporting surfaces which are intended to bear against an end surface of the supporting arm. The supporting surfaces are arranged at different distances from a rear side surface of the label holder. Each surface corresponds to a certain label angle. Alternatively the slide may be provided with a single slanted surface, thereby allowing stepless adjustment of the label angle.

**[0007]** WO 99/27824 also describes a similar label holder. However, at this arrangement, instead of being provided with a displaceable slide, a pivotal adjustment member is rotationally fixed to a rear surface of the label holder, such that it may be rotated about an axis which is perpendicular to the cross-piece. The pivotal adjustment member comprises two legs, the end surfaces of which are arranged at different distances from the axis. The end surfaces are arranged to bear against a longitudinal side surface of the supporting arm. By selectively rotating the pivotal member such that either of the end surfaces bears against the supporting arm, the label holder will assume a corresponding label angle.

**[0008]** A problem with the above mentioned known label holders is that they are comparatively complex to manufacture and that they require a number of separate constituent parts which are assembled before use.

### SUMMARY

**[0009]** An object of the present invention is to provide an enhanced label holder for attaching an electronic label to a support.

**[0010]** Another object is to provide such a label holder which allows easy adjustment and maintaining of the label angle.

**[0011]** A further object is to provide such a label holder which may be readily manufactured in one single piece.

**[0012]** It is a further object to provide such a label holder which may be manufactured by extrusion.

**[0013]** A further object is to provide such a label holder which is reliable in use.

**[0014]** Yet another object is to provide such a label holder which may be used at existing label holder sup-

ports without requiring any adaptation of the supports or any additional components to be mounted.

**[0015]** These and other objects are achieved by a label holder as set out in the preamble of claim 1, which label holder exhibits the special technical features specified in the characterizing portion of said claim.

**[0016]** The label holder is intended for attaching an electronic label to a support device, which support device comprises a supporting arm and a cross-piece arranged transversely to the supporting arm. The label holder comprises; a label receiving portion, a cross-piece receiving portion arranged to enclose at least a portion of the cross-piece and defining a first pivotal axis about which the label holder is pivotal in relation to the support, and an angle adjusting portion. The angle adjusting portion is movable between at least two different positions and arranged to, in at least one of said positions, be supported by the support device for maintaining the label holder in a corresponding pivotal label angle in relation to the support. The label holder further comprises a hinge by which said angle adjusting portion is pivotally connected to the label receiving portion, about a second pivotal axis.

**[0017]** By the arrangement of the hinged angle adjusting portion, the label holder may readily be set to any one of at least two different label angles. In at least one of these label angle positions, the support of the angle adjusting portion against the support device prevents the label holder to be pivoted about the first pivotal axis in at least one direction. The label holder is thus maintained in said at least one label angle position.

**[0018]** An important aspect of the invention lies in that the movable angle adjustment portion is connected to the label receiving portion by means of a hinge. By this means the movability of the angle adjustment portion, which is necessary for allowing the desired label angle adjustment, is accomplished at the same time as the entire label holder, including the movable part, may be manufactured in one single piece. The entire label holder may thus be manufactured e.g. by a single injection moulding operation. Thereby no assembly operations or manufacturing, stock keeping or distribution of separate parts other than the label holder itself is necessary. This provides an essential advantage in regard of reduced costs for manufacturing, stock keeping and distribution.

**[0019]** The second pivotal axis is preferably arranged in parallel with the first pivotal axis. By this means it is made possible to design the entire label holder as a profile element which may be manufactured in one piece by an extrusion operation. Hereby the manufacturing costs may be further reduced. This method of manufacturing further allows for the production of comparatively long profile blanks, which may be cut to any desired length for forming label holders adapted to electronic labels having varying dimensions.

**[0020]** The angle adjusting portion may comprise a free end which, in a first pivotal position, is distal from the label holder portion and, in a second pivotal position, is proximal to the label holder portion. Such an arrangement

allows for that the free end of the angle adjusting portion may be brought into supporting contact with various parts of the support device for achieving different label angles.

**[0021]** The free end may be arranged to be supported by an end surface of the supporting arm when it assumes its second pivotal position. The end surface of the supporting arm provides a well defined supporting surface, whereby the free end may be firmly supported by this surface for secure fixation of the corresponding label angle.

**[0022]** The free end may be arranged to be supported by a longitudinal side surface of the supporting arm when it assumes its first pivotal position. Hereby, the longitudinal position along the supporting arm, at which position the free end takes support in the first pivotal position may be varied. The corresponding label angle may thus be varied accordingly.

**[0023]** The cross-piece receiving portion may comprise a first channel member which is arranged to receive a first portion of the cross-piece. By this means a reliable attachment of the label holder to the cross-piece is readily achieved at the same time as the pivotal movability of the label holder is accomplished.

**[0024]** The cross-piece receiving portion may further comprise a second channel member which is arranged to receive a second portion of the cross-piece and which is aligned with and separated from the first channel member by a gap, which is arranged to receive the supporting arm. Hereby the secure attachment of the label holder is enhanced further. The gap arranged between the two channel members further ensures free pivotal movement of the label holder without being hindered by the supporting arm. In cases where the label holder is manufactured through extrusion, the gap may readily be provided by means of a simple cutting operation.

**[0025]** The first and/or second channel member may be elastic and arranged to be snap-fitted around the cross-piece. This allows for easy snap-on fastening and removal of the label holder to and from the support device.

**[0026]** The label holder may comprise an engagement portion which is arranged to engage the free end for maintaining the free end in its second pivotal position. Hereby it is further assured that the free end will remain supported by the supporting arm's end surface when the angle adjusting portion assumes its second pivotal position.

**[0027]** The engagement portion may be arranged at the first and/or second channel member. This entails for a simple and space saving design with comparatively few constituent portions.

**[0028]** The label holder may be manufactured in one piece. This allows for advantageous manufacturing by injection moulding or extrusion of suitable polymer materials.

**[0029]** The label holder may e.g. be manufactured by injection moulding or co-extrusion of at least two different materials, one of said materials forming the hinge and the other material forming the label receiving portion. The

allows for that the hinge is provided with a desired high degree of flexibility and the label receiving portion with a high degree of rigidity for allowing secure fixation of the label in the label receiving portion.

[0030] The label receiving portion may comprise a rear wall, an upper wall and a lower wall, said walls defining a channel having a generally U-shaped cross section. This allows for secure fixation of the label while at the same time allowing the label holder to be formed as a profile element.

[0031] One of the upper and lower walls may comprise a longitudinally extending groove for engagement with a corresponding flange on the label and the other a number of cavities for engagement with a corresponding number of protruding taps arranged on the label. By this means secure fixation of the label in both the forward and the longitudinal directions is readily achieved.

[0032] At least one of the upper and lower walls may be elastic for allowing a label to be snap-fitted into engagement with the upper and lower walls. This allows for easy mounting of the label at the label holder.

[0033] The invention also concerns an arrangement for displaying electronic information comprising a label holder according as set out above and an electronic label, which is arranged to be fixedly received in the label receiving portion. The arrangement provides the same advantages as the label holder described above.

[0034] Further object and advantages of the invention will be apparent from the following description of embodiments and from the appended claims.

[0035] Generally, all terms used in the claims are to be interpreted according to their ordinary meaning in the technical field, unless explicitly defined otherwise herein. All references to "a/an/the element, apparatus, component, means, step, etc." are to be interpreted openly as referring to at least one instance of the element, apparatus, component, means, step, etc., unless explicitly stated otherwise. The steps of any method disclosed herein do not have to be performed in the exact order disclosed, unless explicitly stated.

## BRIEF DESCRIPTION OF THE DRAWINGS

[0036] The invention is now described, by way of example, with reference to the accompanying drawings, in which:

Fig 1 is a perspective view from the front and above of a label holder according to an embodiment of the invention. The figure also illustrates an electronic label fixed to the label holder and a supporting device to which the label holder is attached.

Fig. 2 is a perspective view from behind of the label holder shown in fig. 1, where the label holder with the electronic label has been detached from the support device.

Fig. 3 is a perspective view corresponding to fig. 2, wherein the electronic label has been removed.

Fig. 4 is a perspective view from the front of the electronic label shown in fig. 1.

Fig. 5 is a side view of the label holder shown in fig 1, where the label holder has assumed a first label angel position.

Fig. 6 is a side view corresponding to fig. 5, where the label holder has assumed a second label angel position.

## DETAILED DESCRIPTION

[0037] The invention will now be described more fully hereinafter with reference to the accompanying drawings, in which certain embodiments of the invention are shown. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein; rather, these embodiments are provided by way of example so that this disclosure will be thorough and complete, and will fully convey the scope of the invention to those skilled in the art. Like numbers refer to like elements throughout the description.

[0038] Fig. 1 illustrates a label holder 1 according to an embodiment of the invention and an electronic label 4 fixed to the label holder. In figs. 1, 5 and 6 the label holder 1 is attached to a support device 5, whereas figs. 2 and 3 illustrate the label holder 1 being separated from the support device 5.

[0039] The support device 5 comprises a supporting arm 51 and a cross-piece 52 which is fixed to a free end of the supporting arm 51 such that it extends transversely to the longitudinal direction of the supporting arm 51. In use the support device 5 is arranged above a prong or peg hook (not shown) onto which a plurality of products may be threaded, one after the other, in order to be suspended by the prong. The support device is arranged such that the cross-piece is arranged vertically above and in proximity to the foremost product suspended from the prong. The supporting arm 51 and the cross-piece 52 may be manufactured by metal rods that are welded or soldered together.

[0040] The label holder 1, comprises a label receiving portion 10, a cross-piece receiving portion 30 and an angle adjusting portion 20.

[0041] As best seen in fig. 3, the label holder is manufactured in one single piece. In the shown example the label holder 1 has been manufactured by a single injection moulding operation of two different polymers.

[0042] The label receiving portion 10 forms a channel 11 with a generally U-shaped cross section. The cross section is formed by a rear channel wall 12, an upper channel wall 13 and a lower channel wall 14. The upper channel wall 13 extends forwardly from an upper edge

of the rear channel wall 12. The lower channel wall 14 extends forwardly from a lower edge of the rear channel wall 12. All channel walls 12, 13, 14 extend along the entire longitudinal length of the label holder 1. The upper 13 and lower 14 channel walls extend generally in parallel with each other and generally perpendicular to the rear wall 12. The material of the label receiving portion is somewhat resilient such that the free ends of the upper 13 and lower 14 channel walls may be elastically flexed or bent in a direction away from each other. A suitable material for forming the label receiving portion is rigid PVC.

**[0043]** The upper channel wall 13 is provided with a first groove 15 which extends in the longitudinal direction over the entire length of the upper channel wall 13. The opening of the first groove faces downwardly, towards the lower channel wall 14. The lower channel wall 14 is provided with a second groove 16 which extends in the longitudinal direction over the entire length of the lower channel wall 14. The opening of the second groove 16 faces upwardly, towards the upper channel wall 14. A pair of cavities 17 (only one being visible in fig. 3) is arranged in the lower channel wall 14, in front of the second groove 16. The cavities 17 are open upwards and forwardly, such that they communicate with the second groove 16.

**[0044]** The electronic label 4 is shown separately in fig 4. The label 4 comprises a display screen 41 for visual presentation of information. The label is generally formed as a rectangular parallelepiped and comprises an upper engagement wall 42 and a lower engagement wall 43. The upper 42 and lower 43 engagement walls are arranged generally opposite to each other. The distance between the upper 42 and lower 43 engagement walls corresponds to the distance between the upper 13 and lower 14 channel walls, such that the label 4 may be inserted into the channel 11 between the upper 13 and lower 14 channel walls with a close fit or a press fit as will be described more in detail below.

**[0045]** A first engagement flange 44 is arranged at the upper engagement wall 42. The first engagement flange 44 protrudes upwardly from the upper engagement wall 42 and extends in the longitudinal direction over essentially the entire length of the upper engagement wall 22. The cross sectional dimensions of the first engagement flange 44 corresponds to the cross sectional dimensions of the first groove 15, such that the first flange 44 may be received in and engaged with the first groove 15 with a close fit.

**[0046]** A second engagement flange 45 is arranged at the lower engagement wall 43. The second engagement flange 45 protrudes downwardly from the lower engagement wall 43 and extends in the longitudinal direction over essentially the entire length of the lower engagement wall 43. The cross sectional dimensions of the second engagement flange 45 corresponds to the cross sectional dimensions of the second groove 16, such that the second flange 45 may be received in and engaged with

the second groove 16 with a close fit.

**[0047]** A pair of forwardly protruding taps 46 is arranged on the second engagement flange 45 such that they protrude forward from the second engagement flange 45. The mutual distance between the taps 46 corresponds to the distance between the cavities 17. The cross sectional dimensions of the taps 46 correspond to or is somewhat smaller than the opening dimensions of the cavities 17, such that each tap 46 may be engagingly received in a respective cavity 18. In the illustrated example the taps 46 protrude in the forward direction from the second engagement flange 45. The taps may however also be arranged to protrude backwards or downwards or in any combination of these directions.

**[0048]** In use the label 4 may be inserted into the channel 11 by first inserting the lower engagement wall 43 into the channel, the second engagement flange 45 being aligned with the second groove 16 and the two taps 46 being aligned with a respective cavity 17. Thereafter the upper engagement wall 42 of the label 4 may be rotated backwards until the upper engagement wall 42 makes contact with the upper channel wall 13. Continued backward rotation of the upper engagement wall 42 will then, due to the resiliency of the upper 13 and lower 14 channel walls, force the free ends of said channel walls 13, 14 to be separated from each other such that the upper engagement wall 42 will snap into the channel 11 and the upper engagement flange 44 will snap into engagement with the first groove 15.

**[0049]** For accomplishing the desired force by which the label 4 is retained between the upper 13 and lower 14 channel walls, the distance between the upper 13 and lower 14 channel walls is chosen with respect to the distance between the upper 42 and lower 43 engagement walls and the resiliency of the material forming the channel walls. Typically the distance between the upper 13 and lower 14 channel walls is chosen somewhat smaller than the distance between the upper 42 and lower 43 engagement walls for accomplishing a press fit. As is readily understood the retaining force is increased by increasing material rigidity and by decreasing the distance between the upper 13 and lower 14 channel walls. By this means it is possible to readily adapt the retaining force to any desired value.

**[0050]** The above described fixation of the label 4 in the label receiving portion 10 of the label holder 1 provides a reliable and simple fixation of the label by which the label is securely prevented both from being pulled put in a forward direction and from being displaced longitudinally.

**[0051]** The cross-piece receiving portion 30 comprises a first 31 and a second 32 channel member. The channel members 31, 32 are both fixed to the upper edge of the rear channel wall 12 and extend generally backwards from this edge. The channel members 31, 32 each exhibits a generally semi cylindrical first curved portion, which first curved portions together with the rear channel wall defines a respective channel 33, 34 for receiving a

portion of the cross-piece. Both channel members 31, 32 further exhibit a respective free end portion 35, 36 which is bent rearward, away from the rear channel wall 12. The channel members 31, 32 are formed of a somewhat elastic material, e.g. rigid PVC, such that their free end portions 35, 36 are able to flex rearwards.

**[0052]** By this means the channel members 31, 32 may be snap-fitted around the cross-piece such that a respective longitudinal portion of the cross-piece 52 is received in each channel 33, 34. When the cross-piece 52 has been received in the channels 33, 34 and thereby enclosed by the cross-piece receiving portion 30, the cross-piece receiving portion defines a first pivotal axis, which axis is parallel to the longitudinal direction of the cross-piece and about which first axis the label holder 1 is pivotal relative to the support device. The channel members 31, 32 and their respective channels 33, 34 are aligned one after the other in the direction of the first pivotal axis. For allowing insertion of the cross-piece into the channels 33, 34 and free pivotal movement of the label holder 1, the channel members 31, 32 are separated by an intermediate gap in which the supporting arm 51 is received.

**[0053]** The angle adjusting portion 20 of the label holder comprises a wing 21, which extends in parallel with the first pivotal axis, over essentially the entire length of the label holder 1. The wing 21 is connected to the label receiving portion 10 by means of a hinge 22 and a flange 23. The flange 23 extends in parallel with the first pivotal axis and protrudes rearward from the rear channel wall 12. The hinge 22 is formed of a strip of a flexible material, which is arranged between and fixed to the flange 23 and the wing 21. In the illustrated example the hinge is formed of the polymer material Hytrel®. The hinge extends in parallel with the first pivotal axis and defines a second pivotal axis, about which the wing 21 is pivotal. The second pivotal axis thus also extend in parallel with the first pivotal axis. The wing 21 exhibits a free end 24 which moves when the wing 21 is pivoted about the second pivotal axis.

**[0054]** As best seen in figs. 5 and 6, the wing 21 is arranged to be pivoted about the second pivotal axis such that the free end 24 is moved between a first pivotal position (shown in fig. 5) and a second pivotal position (shown in fig. 6). In the first pivotal position, the free end 24 assumes a position which is distal from the label holder portion 10 and in the second pivotal position, the free end 24 assumes a position which is proximal to the label holder portion 10.

**[0055]** In the first pivotal position, the free end 24 bears against a longitudinal side surface 53 of the supporting arm 51. By the fact that the wing 21 is connected to the label holder portion 10, the free end's 24 supporting contact with the supporting arm prevents the label holder portion from being pivoted clockwise as seen in fig. 5. The label holder 1 is thus maintained at a defined first label angle which in the illustrated example means that the angle between the supporting arm and the plane of the rear channel wall 12 is approx. 90°.

**[0056]** In fig. 6, the label holder 1 has been pivoted about the first pivotal axis in the anti-clockwise direction to a label angle as defined above of approx. 130°. Additionally, the wing 21 has been pivoted clockwise about the second pivotal axis to its second pivotal position such that the free end 24 has assumed the proximal position relative to the label holder portion 10. In this position, the free end 24 bears against the end surface 54 of the supporting arm 51. The free end 24 of the wing 21 is in this position engaged with the free end portions 35, 36 of the channel members 31, 32. Additionally, the free end 24 of the wing 21 is in this position clamped between the free end portions 35, 36 of the channel members 31, 32 and the end surface 54 of the supporting arm 51. The free end portions 35, 36 of the channel members 31, 32 thus forms respective engaging members which prevents the free end 24 of the wing 21 to slip or in any other way loose its bearing contact with the end surface 54 of the supporting arm 51. The wing 21 is thus securely held in its second pivotal position whereby clockwise pivotal movement of the label holder portion is securely prevented.

**[0057]** From the position shown in fig. 6 it is possible to further rotate the label holder such that it assumes a label angle of about 180°. This is accomplished by arranging the channel members 31, 32 such that the distance between the second pivotal axis and the upper rear edge of the rear wall 12 is sufficiently great. From such a fully pivoted position further clockwise rotation of the label holder is hindered by the upper rear edge of the rear wall 12 coming in contact with the upper side surface of the supporting arm 51. Rotation to the 180° position is allowed for facilitating loading of products onto the prong or peg hook arranged below the label holder.

**[0058]** From the position shown in fig. 6, the label holder may be returned to the position shown in fig. 5. For allowing this, the label holder 1 may be pivoted further in the anti-clockwise direction whereby the free end 24 of the wing 21, is released from the engagement with the free end portions 35, 36 of the channel members 31, 32. Thereafter the wing 21 may be pivoted anti-clockwise about the second pivotal axis such that it assumes its first pivotal position and the label holder may then be pivoted clockwise about the first pivotal axis until the free end 24 again bears against the longitudinal side surface of the supporting arm 51.

**[0059]** The invention has mainly been described above with reference to a few embodiments. However, as is readily appreciated by a person skilled in the art, other embodiments than the ones disclosed above are equally possible within the scope of the invention, as defined by the appended patent claims.

## Claims

1. A label holder (1) for attaching an electronic label (4) to a support (5), which support comprises a support-

ing arm (51) and a cross-piece (52) arranged transversely to the supporting arm, said label holder comprising;

- a label receiving portion (10),
  - a cross-piece receiving portion (30) arranged to enclose at least a portion of the cross-piece and defining a first pivotal axis about which the label holder is pivotal in relation to the support, and
  - an angle adjusting portion (20), which is movable between at least two different positions and which is arranged to, in at least one of said positions, be supported by the support for maintaining the label holder in a corresponding pivotal angle in relation to the support, **characterized by** a hinge (22) by which said angle adjusting portion (20) is pivotally connected to the label receiving portion (10), about a second pivotal axis.
2. A label holder according to claim 1, wherein said second pivotal axis is parallel to the first pivotal axis.
  3. A label holder according to claim 1 or 2, wherein the angle adjusting portion (20) comprises a free end (24) which, in a first pivotal position, is distal from the label holder portion (10) and, in a second pivotal position, is proximal to the label holder portion.
  4. A label holder according to claim 3, wherein the free end (24) is arranged to be supported by an end surface (52) of the supporting arm (51), when it assumes its second pivotal position.
  5. A label holder according to claim 3 or 4, wherein the free end (24) is arranged to be supported by a longitudinal side surface (53) of the supporting arm (51) when it assumes its first pivotal position.
  6. A label holder according to any of claims 1-5, wherein the cross-piece receiving portion (30) comprises a first channel member (31) which is arranged to receive a first portion of the cross-piece (52).
  7. A label holder according to claim 6, wherein the cross-piece receiving portion (30) comprises a second channel member (32) which is arranged to receive a second portion of the cross-piece (52) and which is aligned with and separated from the first channel member by a gap, which is arranged to receive the supporting arm (51).
  8. A label holder according to claim 6 or 7, wherein the first (31) and/or second (32) channel member is elastic and arranged to be snap-fitted around the cross-piece (52).

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9. A label holder according to any of claims 3-8, comprising an engagement portion (35, 36) which is arranged to engage the free end (24) for maintaining the free end in its second pivotal position.

10. A label holder according to claim 9, wherein the engagement portion (35, 36) is arranged at the first (31) and/or second (32) channel member.

11. A label holder according to any of claims 1-10, wherein the label holder (1) is manufactured in one piece.

12. A label holder according to claim 11, wherein the label holder (1) is manufactured by injection moulding or co-extrusion of at least two different materials, one of said materials forming the hinge (22) and the other material forming the label receiving portion (10).

13. A label holder according to any of claims 1-12, wherein the label receiving portion (10) comprises a rear wall (12), an upper wall (13) and a lower wall (14), said walls defining a channel (11) having a generally U-shaped cross section.

14. A label holder according to claim 13, wherein at least one of the upper (13) and lower (14) walls comprises a longitudinally extending groove (15,16) for engagement with a corresponding flange (44, 45) on the label (4) and the other comprises a number of cavities (17) for engagement with a corresponding number protruding taps (46) arranged on the label (4).

15. An arrangement for displaying electronic information comprising a label holder (1) according to any of claims 1-14 and an electronic label (4), which is arranged to be fixedly received in the label receiving portion (10).

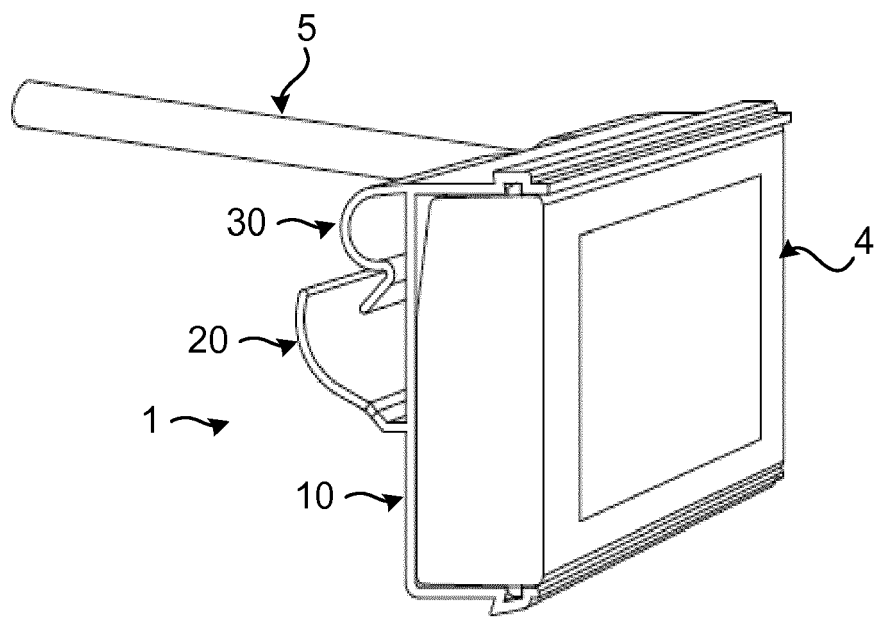


Fig. 1



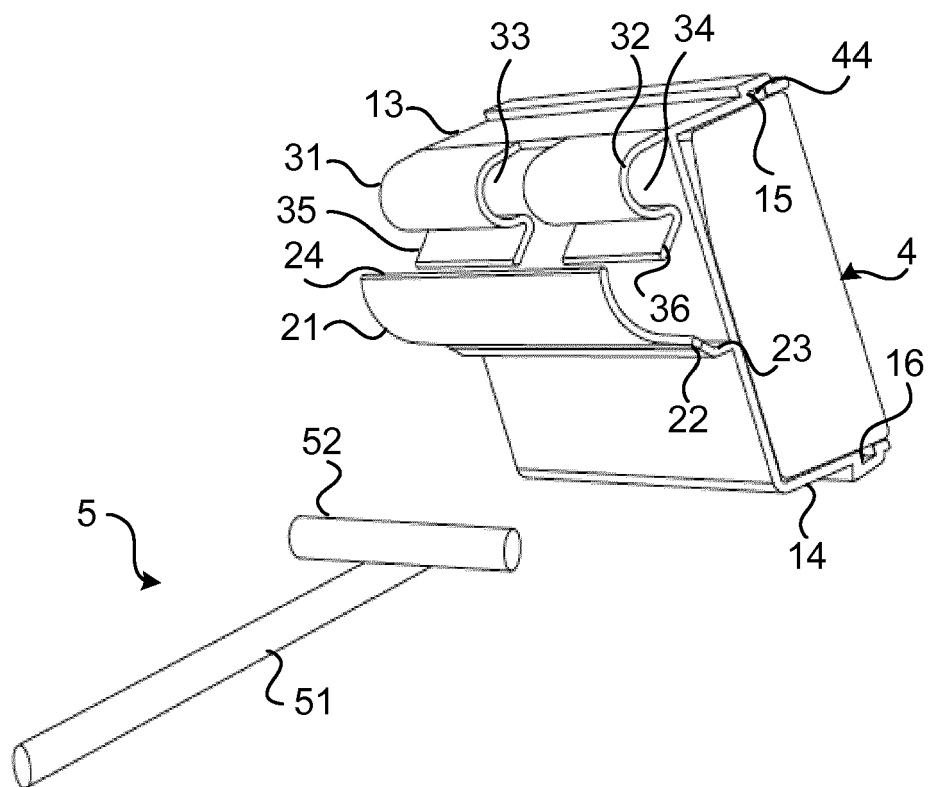


Fig. 2

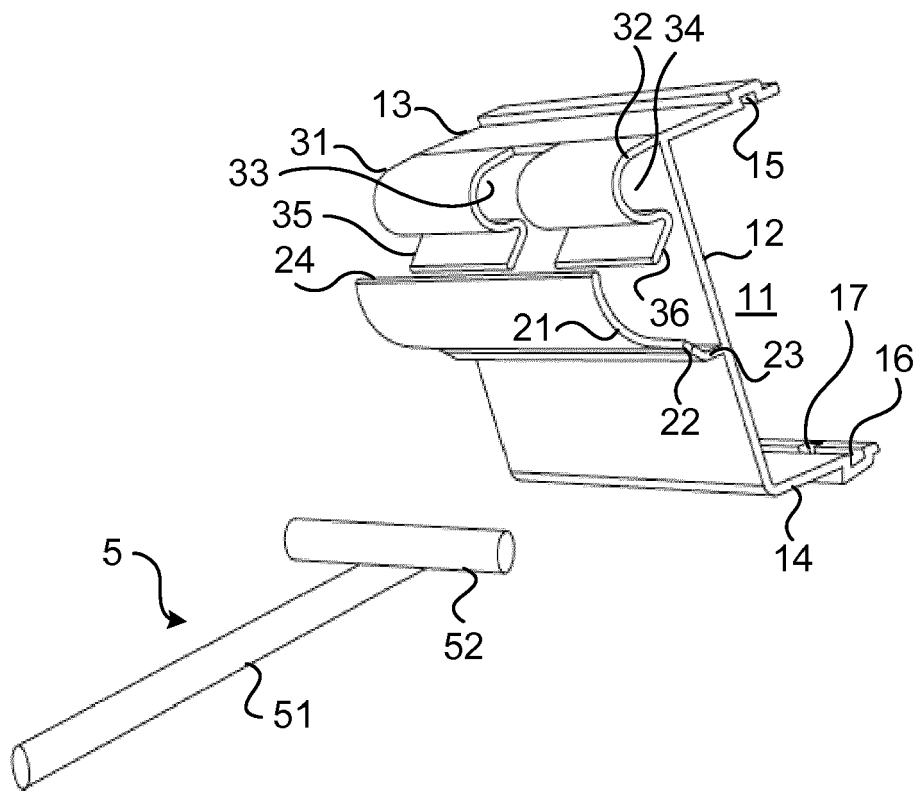


Fig. 3

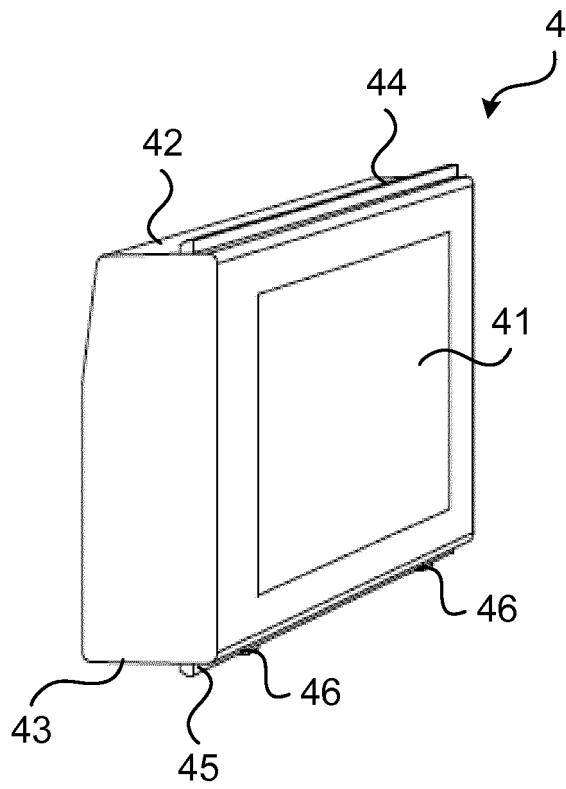


Fig. 4

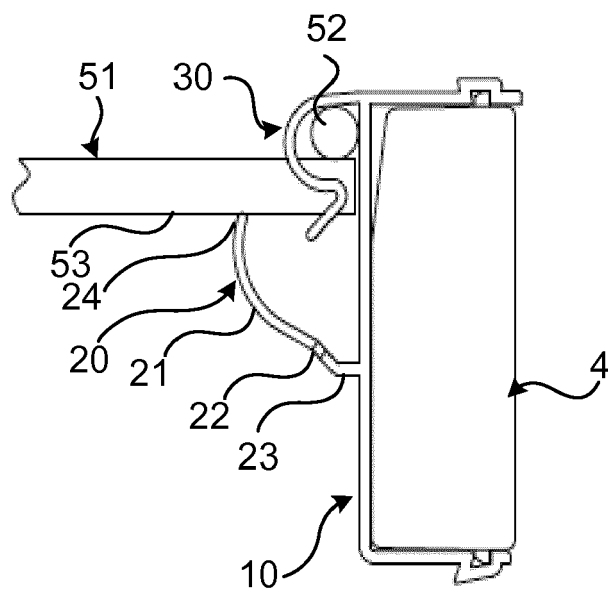


Fig. 5

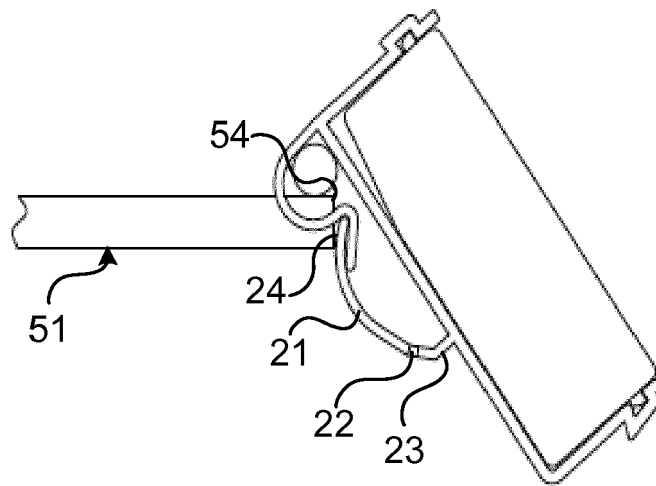


Fig. 6



## EUROPEAN SEARCH REPORT

Application Number  
EP 13 15 6306

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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