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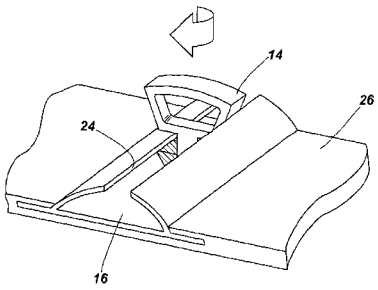


Fig. 2

(57) Abstract: A retention system (10) comprises at least one elongate channel member (12) and at least one clip (14). The channel member defines an internal channel (22) and has a longitudinal slot (24) providing access to the channel. Each clip has an engagement portion (28, Fig. 3) for location in the channel and an external attachment portion (30, Fig.3) connected to the engagement portion by a neck which passes through the slot. The engagement portion is shaped such that in one angular orientation it is able to pass through the longitudinal slot and such that once inserted it can be moved to another angular orientation in which it is unable to pass through the longitudinal slot. At least part of the clip (14) which contacts the channel member (12) once inserted comprises a friction material (34) adapted so that contact between the material and the channel member resists longitudinal movement of the clip along the channel member. The retention system (10) is particularly adapted for use as a luggage retention system for the luggage compartment of a vehicle.

Retention System

Technical Field of the Invention

The present application relates to a retention system. More particularly, but not exclusively, the invention relates to a retention system for use in a luggage compartment of a vehicle.

Background to the Invention

It is known to provide retention systems in the luggage compartment of a vehicle which can be used to retain items placed in the compartment. Typically, such retention systems are in the form of hinged loops to which retention members, such as luggage straps or nets, can be hooked. The known hinged loops tend to project from the surfaces to which they are attached and so are prone to damage or may cause damage to items placed in the compartment. They may also encroach into valuable storage space. Another problem with the known retention arrangements is that the hinged loops are fixed in position and so that items can only be retained within the luggage compartment in certain positions or by using large retention straps or nets.

It is also known to provide retention members that are slidably mounted in runners in the vehicle luggage compartment. US 5, 176, 479, for example, discloses a beam member which is slidably mounted to a pair of spaced track members fixed in the luggage compartment of a vehicle. The arrangement includes a screw threaded fastener and tap plate associated with each track member to lock the beam in position. This arrangement has the advantage that the position of the beam can be adjusted depending on the size of the luggage but the arrangement is very complicated and expensive to manufacture and yet still provides only limited flexibility.

There is a need, therefore, for an improved retention system for a vehicle luggage compartment which overcomes, or at least mitigates, some or all of the disadvantages of the known retention devices.

There also a need for a simple retention system that can be used in a variety of applications.

Summary of the Invention

In accordance with a first aspect of the invention, there is provided a retention system comprising at least one elongate channel member and one or more clips for insertion into the channel member, the channel member defining an internal channel and having a longitudinal slot provi ding access to the channel, each clip having an engagement portion adapted to locate in the channel and an external attachment portion connected to the engagement portion by means of a neck which passes through the longitudinal slot, the engagement portion being shaped such that in one angular orientation it is able to pass through the longitudinal slot, so as to enable it to be inserted into or removed from the channel member, and such that once inserted it can be moved to another angular orientation in which it is unable to pass through the longitudinal slot to prevent its removal from the channel member, in which at least part of the clip which contacts the channel member once inserted comprises a friction material adapted so that contact between the material and the channel member resists longitudinal movement of the clip along the channel member.

In a retention system in accordance with the invention, a clip can be inserted in a channel member at any desired location along its length and used to secure a retention member, such as a strap, net or the like, or any other item to the channel member. The application of a force to the clip will tend to rock the clip relative to the channel member bringing regions of the friction material into contact with the channel member so that the clip does not slide along the channel member. This provides a very simple and effective method of locking the clip in position.

The retention system may comprise a plurality of clips, each clip being insertable in the, or any one of the, channel member(s).

The retention system will often comprise two or more channel members which will be spaced apart. In this type of arrangement, clips inserted into two of the channel members can be used to secure a retention member or other item between them. The channel members may be aligned parallel to one another but this is not essential.

The attachment portion of each clip may be adapted to enable a retention member or other item to be attached to it. The attachment portion could comprise a buckle loop to which a retention member can be affixed. A range of clips having different types of attachment portion can be provided. The clips may be separate items or they may be provided integral with or pre-attached to a retention member or other item to be secured.

The clip engagement portion may have a dimension in a first direction which is smaller than the width of the longitudinal slot in the channel member and a dimension in a second direction which is larger than the width of the longitudinal slot. The neck and the engagement portion may be generally "T" shaped. The clip may be made of a load bearing material, such as a metallic or polymeric material, onto which the friction material is over-moulded or coated. Alternatively, the friction material may be in the form of separate pads or sleeves that are attached to a load bearing core. The friction material may be a natural or synthetic rubber or another polymeric material.

The at least one elongate channel member may be extruded from a polymeric, metallic, or other suitable material. The at least one channel member may comprise a generally planar base region and two curved side wall regions extending from the base towards each other to define the internal channel, the sidewalls having free ends that are spaced apart to define the longitudinal slot. The at least one channel member may be adapted to fixed to a support surface which may be substantially rigid. Alternatively, the channel member may be affixed to or moulded integrally with a flexible mat. Channel

members can also be provided as integral parts of a support surface such as a display unit, framework or shelving arrangement.

Part of the attachment portion of the at least one clip may overlie in spaced relation a part of the engagement portion and at least opposing surfaces of the overlying parts of the attachment and engagement portions may comprise the friction material. The arrangement may be configured such that when the at least one clip is engaged in the channel it can be rocked by the application of a lateral load to the attachment portion to bring part of the engagement portion which comprises the friction material into contact with an inner surface of the channel member and a part of the attachment portion which comprises the friction material into contact with an outer surface of the channel. In one embodiment, the engagement portion has locking regions which extend either side of the neck in a common plane, the attachment portion having corresponding locking regions extending in the same plane and which overly in spaced relation the locking regions of the engagement portion, at least opposed surfaces of the engagement portion locking regions and the attachment portion locking regions comprising the friction material.

The system may be adapted for use as a luggage retention system in a luggage compartment of a vehicle. The system can also be used to mount a rolling load tray in the luggage compartment of a vehicle. In this case, the system may comprise a pair of spaced channel members and a rolling load tray, the rolling load tray being mountable to the channel members using one or more clips or clip like members that can be locked to the channel members. The rolling load tray may comprise a base or runners mountable to the channel members by means of the clips and a load tray movable mounted to the base or runners.

Detailed Description of the Invention

An embodiment of the invention will now be described, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of a retention system in accordance with a first embodiment of the invention, showing a clip prior to insertion into the channel member;

Figure 2 is a view similar to that of Figure 1 but showing the clip after insertion;

Figure 3 is a perspective view of a clip forming part of the system of Figures 1 and 2;

Figure 4 is a front view of the clip of Figure 3;

Figure 5 is a side view of the clip of Figures 3 and 4;

Figure 6 is a perspective view of a channel member forming part of the system of Figures 1 and 2;

Figure 7 is a schematic plan view of part of the luggage compartment of a vehicle showing a retention system in accordance with the invention in use retaining an item of luggage in position;

Figure 8 is a front view of an alternative embodiment of a clip for use in the retention system of Figures 1and 2; and

Figure 9 is a side view of the clip of Figure 8.

A retention system 10 in accordance with the invention comprises at least one elongate channel member 12 and at least one clip 14 which can be inserted into the channel member at a desired position along its length. In practice, it is envisaged that usually at least two channel members 12 will be used spaced apart and clips used to attach a retention member or other item between the two channel members. However, in some applications, a single channel member may be used.

The channel member 12 can be made from any suitable material but conveniently is extruded from a suitable polymeric or metallic material. The channel member 12 has a planer base 16 and two curved side walls 18, 20

which extend away from the base towards each other to define an internal channel 22. The free ends of the side walls 18, 20 are spaced apart to define a longitudinal slot 24 providing access to the channel 22. Each channel member may be a separate component, as illustrated in Figure 6, which can be secured to a suitable support surface. Channel members can also be incorporated integrally into a support surface. In a further alternative arrangement, one or more channel members 12 can be formed integrally as part of a mat 26 or other surface covering for use as a floor covering in a storage space, such as the luggage compartment of a vehicle. Channel members 12 can be of any suitable length. The base 16 may extend laterally beyond the side walls 18, 20 for ease of mounting the channel member.

Whilst a channel member 12 having curved side walls 18, 20 and a planar base 16 has been found to be particularly effective, it will be appreciated that the channel member could be formed with a different profile..

Clips 14 for use with the channel member 12 have an engagement portion 28 for insertion into the channel 22 and an external attachment portion 30 which remains outside of the channel member. The engagement portion 28 and the attachment portion 30 are joined by a neck 32 which passes through the longitudinal slot.

The engagement portion 28 has a width W, as shown in Figure 5, which is less than the width of the longitudinal slot 24 and a length L, as shown in Figure 4, which is greater than the width of the slot 24. This enables the engagement portion 28 to be inserted into and out of the channel through the slot 24 when it is aligned longitudinally with the slot as shown in Figure 1. Once the engagement portion has been introduced into the channel 22 through the slot 24, the clip 14 can be twisted through 90 degrees, as shown in Figure 2, so that the engagement portion is aligned transversely to the slot 24. In this orientation, the engagement portion 28 is unable to pass through the slot 24 and the clip is locked to the channel member 12. In the present embodiment, the

engagement portion 28 and the neck 32 form a generally "T" shape, the engagement portion having locking regions which project in the same plane on either side of the neck to form the bars of the "T" but it will be appreciated that other shapes can be produced to function in the same way to enable the clip to be twist locked into the channel.

A clip 14 can be inserted into a channel member 12 at any desired position along its length. Parts of the engagement portion 28 and the attachment portion 30 which come into contact with the channel 12 are made from or coated with or are otherwise provided with a friction material 34 which resists sliding movement of the clip 14 relative to the channel member 12. Thus once a clip has been inserted into the channel member 12 it will tend to remain in a given longitudinal position.

The attachment portion 30 is adapted to enable a retention member or other item to be attached to it. In the embodiment illustrated, the attachment portion is in the form of a buckle loop 31 to which items can be clipped. However, the design of the attachment portion 30 can be varied as required by the application and the system may include a range of clips having differently configured attachment portions.

Parts of the attachment portion 30 of the clip 14 overlie the locking regions of the engagement portion 28 in spaced relation. When the clip is locked in the channel, the side walls 18, 20 of the channel member 12 locate between the opposed surfaces of the locking regions of the engagement portion and the overlying parts of the attachment portion. When a lateral force is applied to the clip 14, the clip will tend to rock bringing part of the engagement portion 28 into contact with an inner surface of at least one of the walls 18, 20 and a part of the attachment portion 30 into contact with the outer surface of at least one of the walls. This locks the clip 14 in position and resists movement of the clip along the channel member. The presence of the friction material 34 assists in providing this locking action and also prevents the clip 14 from

marking the channel member. The friction material 34 is present at least on the opposing surfaces of the overlying parts of the engagement and attachment portions 28, 30.

The clip 14 may have a substantially rigid load bearing core 35 which forms the attachment portion 30 and the neck 32 and at least part of the engagement portion 28 and to which the friction material 34 is applied or attached. The core 35 could be manufactured from a substantially rigid polymeric material or from a metallic material onto which the friction material 34 is applied, either as a coating or an over moulding. Alternatively, separate friction pads or sleeves may be attached to the rigid core. Rather than discreet regions of friction material 34 as shown in the drawings, friction material may be provided on all the surfaces of the clip that come into contact with the channel member when the clip is inserted. Any suitable friction material can be used but materials that are resiliently deformable are particularly suitable as they provide a degree of cushioning, preventing the channel member 12 from being marked or damaged. Suitable friction materials include but are not limited to: natural or synthetic rubber or other polymeric materials.

Figures 8 and 9 illustrate an alternative embodiment of a clip 14' for use in the retention system 10. The clip 14' is similar to the clip 14 described above and has a core 35 made of any suitable load bearing material such as a metallic, polymeric, or composite material. The core 35 defines the engagement portion 28, the attachment portion 30 and the neck 32. A friction material 34 covers the lower surface of the attachment portion 30 and the upper surface of the engagement portion 28 on either side of the neck 32. The friction material 34 is arranged for contact with the side walls 18, 20 of the channel member when a load is applied to the clip.

The retention system 10 provides a flexible and simple to use arrangement for attaching items to a surface. The clips 14, 14' can be inserted anywhere along the length of a channel member 12 and are automatically held

in position by a combination the rocking movement of the clip under load and the friction material. No complex clamping arrangement being required to fix each clip in its desired position. Channel members 12 can be provided on any suitable surface whether horizontal, vertical or any angle in-between.

As shown, the clips 14, 14' can be provided as separate items to which retentions members, such as luggage straps, bungee straps and luggage nets, or other items can be attached. Alternatively, clips can be formed integrally with or pre-attached to a retention member or other item. For example, luggage retention straps can have suitable clips at either end or a luggage net can be provided with attachment portions, each having a suitable clip. Clips 14, 14' can also be provided pre-affixed to various luggage items, such as suitcases, bags, golf bags and the like, or any other item which may be secured using the retention system.

Figure 7 illustrates schematically a typical arrangement for use in a vehicle luggage compartment 36. Two channel members 12a, 12b are mounted to the floor 38 of the compartment. The channel members 12a, 12b extend parallel to one another in a longitudinal direction of the compartment and are spaced apart. An item of luggage 40 positioned on the floor of the compartment between the channel members is held in place by means of a luggage net 42. A strap 44 at each corner of the net 42 is attached to a clip 14, 14' which is inserted in a corresponding one of the channel members 12a, 12b.

Whilst two channel members 12a, 12b are shown in Figure 7, it will be appreciated that more than two channel members could be provided in the luggage compartment to allow for greater flexibility. In addition, channel members 12 could also be attached to side, front and/or rear surfaces of the luggage compartment. Channel members could be arranged to extend laterally across the vehicle compartment or in any suitable orientation.

When the retention system is not in use, the clips 14, 14' can be removed from the channel members 12 so that they are not at risk of being

damaged and so that they do not damage other items placed in the compartment. This ensures that the whole of the floor space of the luggage compartment is available for use. With the clips removed, the channel members 12a, 12b act as runners on which luggage items can be slid into the luggage compartment. The spaced channel members 12 can also be used to mount a rolling load assist tray in the luggage compartment using clip like members for insertion in the channel members. Such an arrangement may comprise a base or runners mounted to the channel members 12 using clips 14, 14' and a load tray movably mounted to the base or runners.

The channel members 12 may be fixed to a rigid support surface in the vehicle. However, particularly for use on the floor of the luggage compartment, the channel members 12a, 12b could be formed integrally with or attached to a flexible mat 26 as discussed above. In this case, the weight of the luggage will be relied on to hold the mat 26 in position.

The retention system 10 in accordance with the embodiment described is particularly suited for use in retaining items in a luggage compartment of a vehicle. However, retention systems in accordance with the invention can be adapted to a wide range of applications. For example, a retention system in accordance with the invention could be adapted for use in holding items intended for display or exhibition. Channel members could thus be incorporated in or mounted to a frame or board for holding display items. The retention system in accordance with the invention could also be adapted use in holding items on shelves or other storage arrangements.

Various changes and modifications may be made to the above described arrangements without departing from the scope of the present invention as defined in the claims.

Claims

1. A retention system comprises at least one elongate channel member and at least one clip for insertion into the channel member, the channel member defining an internal channel and having a longitudinal slot providing access to the channel, each clip having an engagement portion adapted to locate in the channel and an external attachment portion connected to the engagement portion by means of a neck which passes through the longitudinal slot, the engagement portion being shaped such that in one angular orientation it is able to pass through the longitudinal slot, so as to enable it to be inserted into or removed from the channel member, and such that once inserted it can be moved to another angular orientation in which it is unable to pass through the longitudinal slot to prevent its removal from the channel member, in which at least part of the clip which contacts the channel member once inserted comprises a friction material adapted so that contact between the material and the channel member resists longitudinal movement of the clip along the channel member.

2. A retention system as claimed in claim1, wherein the system comprises at least two of said channel members arranged in spaced apart relation.

3. A retention system as claimed in claim1 or claim 2, wherein the attachment portion of the at least one clip is adapted to enable a retention member or other item to be attached to it.

4. A retention system as claimed in and one of the preceding claims, in which the attachment portion of the at least one clip comprises a buckle loop.

5. A retention system as claimed in any one of the preceding claims, wherein the system comprises at least one retention member to which at least one clip is attached.

6. A retention system as claimed in any one of the preceding claims, wherein the engagement portion of the at least one clip has a dimension in a first direction which is smaller than the width of the longitudinal slot in the channel member and a dimension in a second direction which is larger than the width of the longitudinal slot.

7. A retention system as claimed in any one of the preceding claims, wherein the neck and the engagement portion of the at least one clip substantially form a "T" shape.

8. A retention system as claimed in any one of the preceding claims, wherein at least part of the at least one clip is made of a load bearing material, such as a metallic or polymeric material, onto which the friction material is over-moulded or coated.

9. A retention system as claimed in any one of the preceding claims, wherein the at least one clip has a load bearing core and the friction material is in the form of separate pads or sleeves that are attached to the load bearing core.

10. A retention system as claimed in any one of the preceding claims, wherein the friction material is a resiliently deformable material.

11. A retention system as claimed in any one of the preceding claims, wherein, the friction material is a natural or synthetic rubber or a polymeric material.

12. A retention system as claimed in any one of the preceding claims, wherein the at least one elongate channel member is extruded.

13. A retention system as claimed in any one of the preceding claims, wherein the at least one channel member comprises a generally planar base region and two curved side wall regions extending from the base towards each other to define the internal channel, the sidewalls having free ends that are spaced apart to define the longitudinal slot.

14. A retention system as claimed in any one of the preceding claims, wherein the at least one channel member is adapted to be fixed to a support surface.

15. A retention system as claimed in any one of claims 1 to 13, wherein the at least one channel member is affixed to or moulded integrally with a flexible mat.

16. A retention system as claimed in any one of the preceding claims, wherein part of the attachment portion of each clip overlies in spaced relation a part of the engagement portion, at least opposing surfaces of the overlying parts of the attachment and engagement portions comprising the friction material.

17. A retention system as claimed in claim 16, in which the arrangement is configured such that when each clip is engaged in the channel it can be rocked by the application of a lateral load to the attachment portion to bring part of the engagement portion which comprises the friction material into contact with an inner surface of the channel member and a part of the attachment portion which comprises the friction material into contact with an outer surface of the channel.

18. A retention system as claimed in claim 16 or claim 17, in which the engagement portion has locking regions which extend either side of the neck in a common plane, the attachment portion having corresponding locking regions extending in the same plane and which overly in spaced relation the locking regions of the engagement portion, at least opposed surfaces of the engagement portion locking regions and the attachment portion locking regions comprising the friction material.

19. A retention system as claimed in claim 13, or any one of claims 14 to 18 when dependent on claim 13, in which each side wall of the channel member is received between opposing surfaces of the engagement and

attachment portions of the or each clip when it is engaged in the channel member, the opposing surfaces comprising the friction material.

20. A retention system as claimed in any one of the preceding claims, where in the system is a luggage retention system for use in a luggage compartment of a vehicle.

21. A retention system as claimed in claim 1, wherein the system comprises a pair of spaced channel members and a rolling load tray, the rolling load tray being mountable to the channel members using the one or more clips.

22. A retention system as claimed in claim 20, in which the rolling load tray comprises a base or runners mountable to the channel members by means of the one or more clips and a load tray movable mounted to the base or runners.

23. A retention system substantially as hereinbefore described, with reference to and as illustrated in Figures 1 to 5 or Figure 6, or Figure 7 or Figures 8 and 9 of the accompanying drawings.

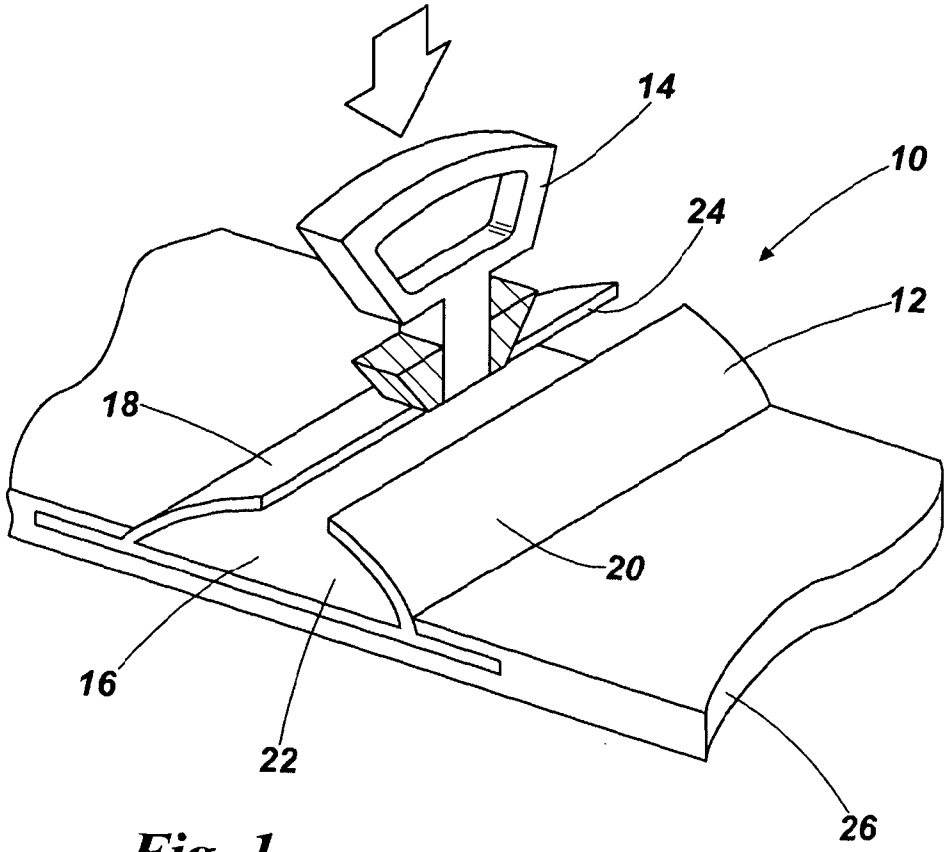


Fig. 1

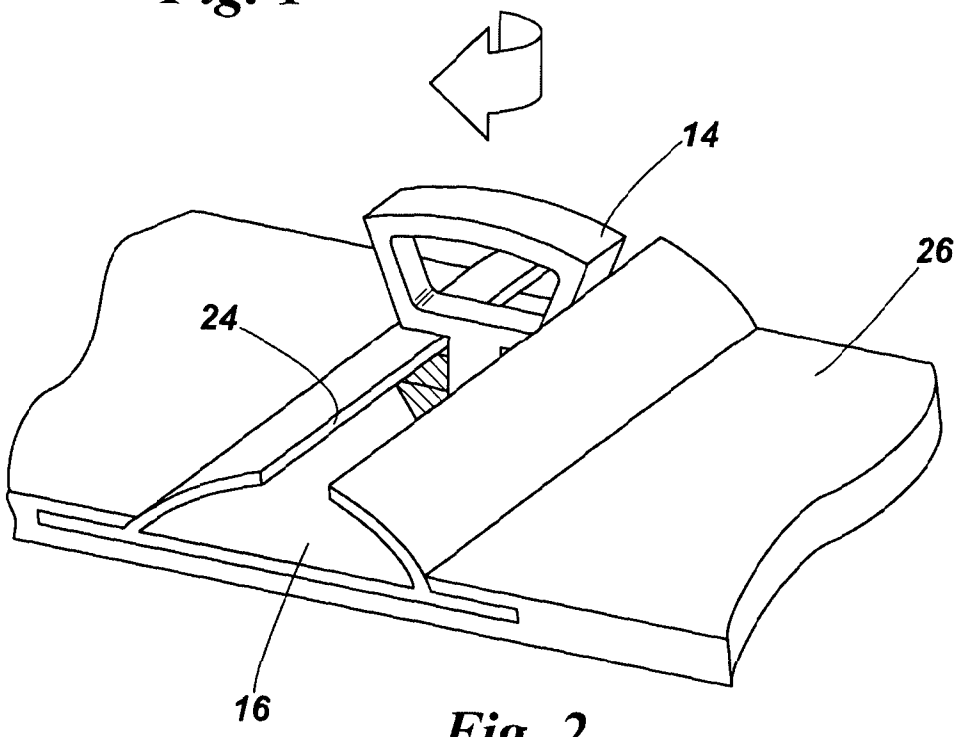


Fig. 2

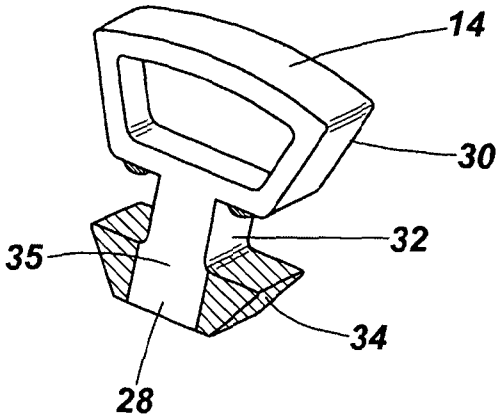


Fig. 3

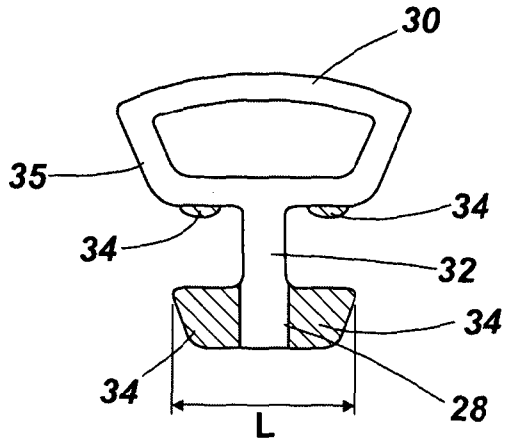


Fig. 4

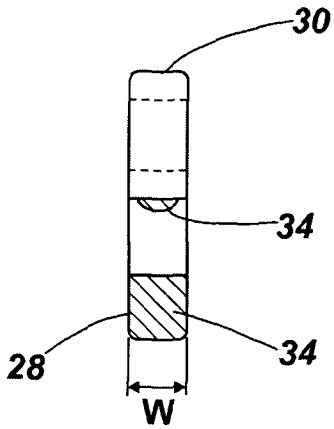


Fig. 5

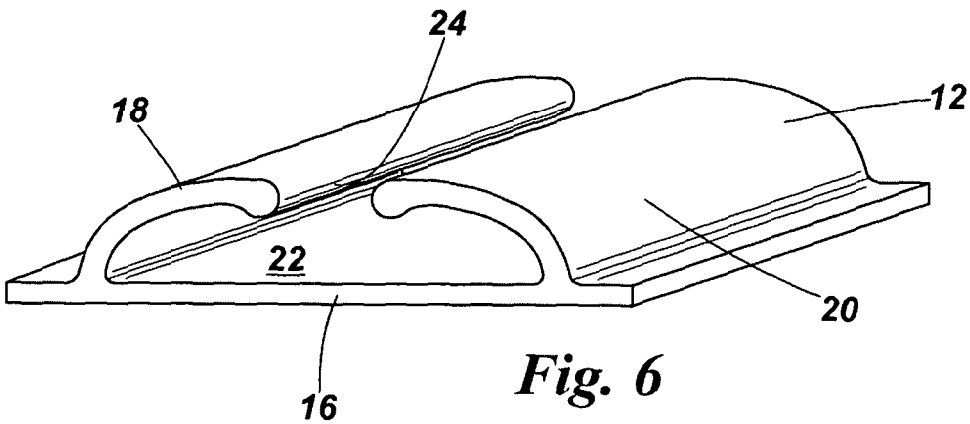


Fig. 6

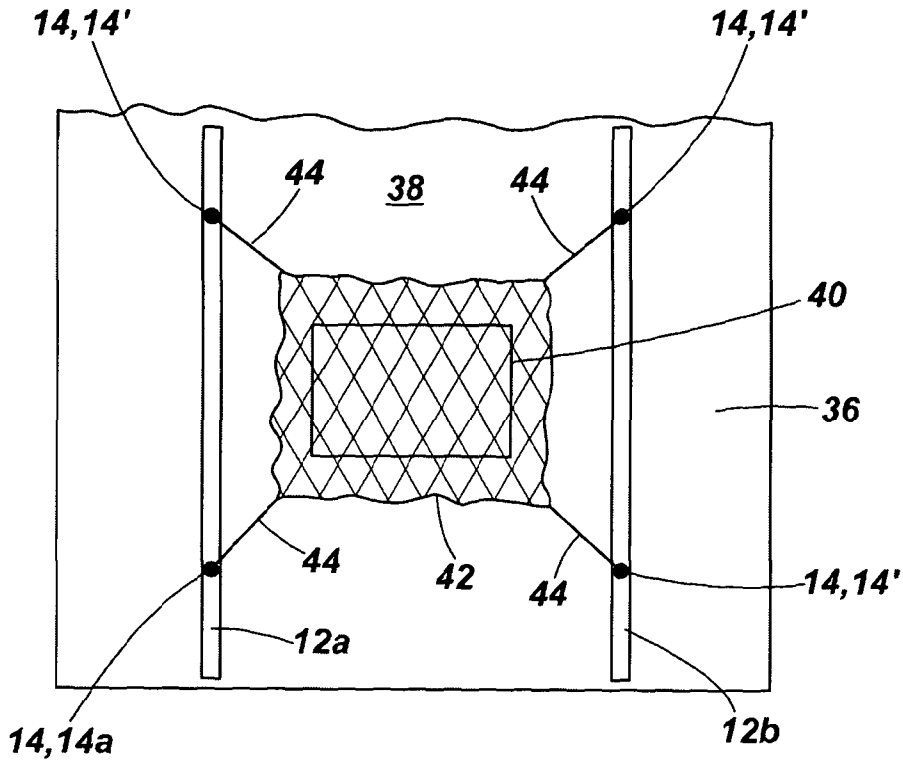


Fig. 7

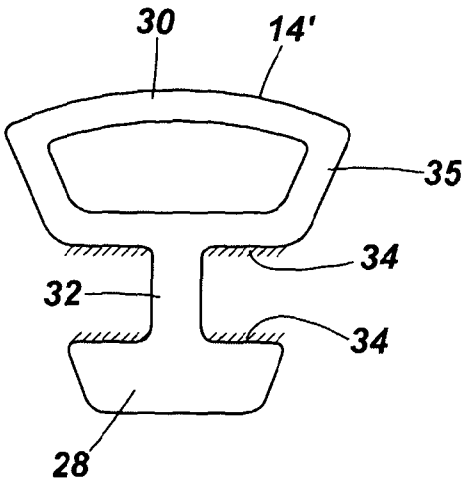


Fig. 8

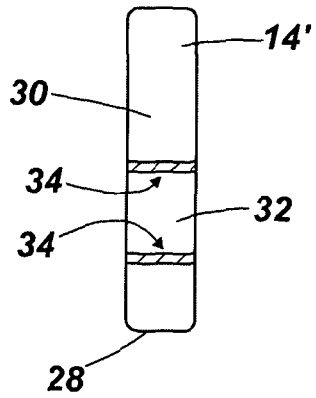


Fig. 9

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2010/001431

A. CLASSIFICATION OF SUBJECT MATTER
INV. B60R5/04 B60P7/08
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
B60R B60P F16B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	FR 2 839 124 A3 (LEGRAND SPA [IT]) 31 October 2003 (2003-10-31) the whole document	1-22
Y	US 6 025 019 A (DUFFY RICHARD J [US]) 15 February 2000 (2000-02-15) column 2, line 56 - line 63; figure 3	1-22
A	US 2006/222455 A1 (SENAKIEWICH RONALD C II [US] SENAKIEWICH II RONALD C [US]) 5 October 2006 (2006-10-05) the whole document	1-22
A	EP 1 829 747 A2 (WAGON AUTOMOTIVE FKT GMBH [DE]) 5 September 2007 (2007-09-05) the whole document	1-22

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[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

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"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
13 October 2010	29/10/2010

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Busuiocescu, Bogdan

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2010/001431

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 585 465 B1 (HAMMOND WILLIAM DOUGLAS [US] ET AL) 1 July 2003 (2003-07-01) the whole document	1-22
A	EP 1 897 757 A1 (GERMAN MARK K [US]) 12 March 2008 (2008-03-12) the whole document	1-22

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2010/001431

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: 23
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 23

Claim 23 is defined by reference to the Figures 1-5 or Figure 6, or Figure7 or Figures 8 and 9 of the application drawings without specifying technical features. The claim does thus not fullfil the requirements of clarity of Article 6 PCT to an extent that a meaningful search was impossible.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.2), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/GB2010/001431

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR 2839124 A3	31-10-2003	ES 1054586 U	16-08-2003
		IT T020020307 A1	09-10-2003
US 6025019 A	15-02-2000	NONE	
US 2006222455 A1	05-10-2006	NONE	
EP 1829747 A2	05-09-2007	DE 102006009886 A1	06-09-2007
US 6585465 B1	01-07-2003	NONE	
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