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(72) Inventor: **Vitoorapakorn, Supavadee
Changwat Samutprakarn 10540 (TH)**

(74) Representative: **Rasch, Michael
Patent- und Rechtsanwälte Lewinsky & Partner,
Gotthardstrasse 81
80689 München (DE)**

(71) Applicant: **Eastern Polymer Industry Co. Ltd.
Amphoe Muang, Changward Samutprakarn (TH)**

(54) **Fastening clip for holding plastic bed liner together with tray of pickup truck**

(57) Fastening clip (1) for holding plastic bed liner (17) together with a wing type tray of a pickup truck.

The fastening clip (1) is arranged between the plastic bed liner (17) and the tray (13) of the truck.

The fastening clip (1) has a protrusive part with a

threaded hole (6) passed through the plastic bed liner (17) for holding it by using screws (14). The other end of the fastening clip is U-shaped for clipping the side wing part of said tray (13). The aim of this invention is to hold said bed liner without boring a hole in said tray.

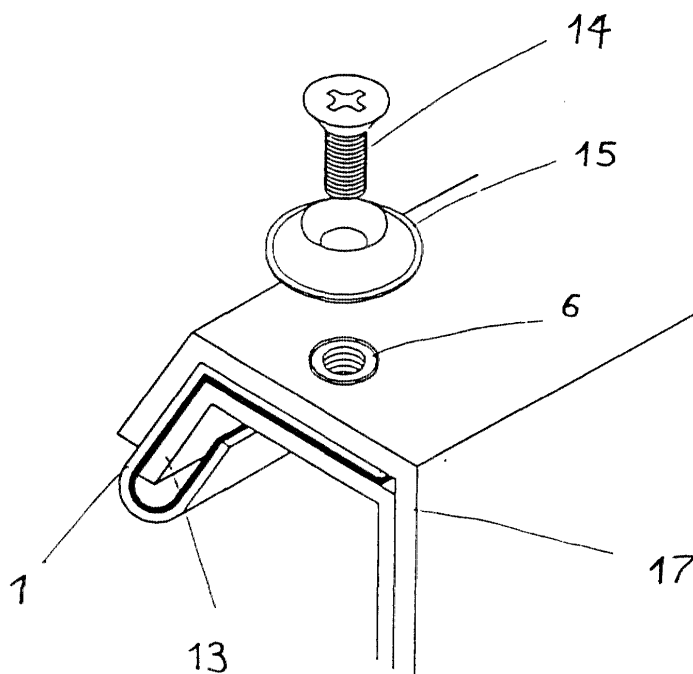


Fig. 5

Description

Brief Description and the Purposes of Invention

[0001] Nowadays, because of there was better improvement the tray of pickup truck. By providing more plastic coating, to bring the tray in more durable strength against striking forces. Thus, plastic bed liner holding together with tray of truck was more popular in using. Plastic bed liner holding together with pickup truck had to have clip for fastening the plastic bed liner together with tray of pickup truck suitable with variety of tray designing feature. More particularly, this invention suitable for the tray with side wings protrusion.

[0002] Clip for fastening tray of pickup truck is the fastening side clip of tray of the truck, need not tray boring mean, wherein clip has upper fastening surface, fixing protrusive holes on upper surface within protrusive hole made of screw. The height of protrusive holes will being equal to plastic bed liner thickness. One end part of plate had protrusive angular with plate and is bent underside in U-shaped character. Fastening clip was arranged between tray of pickup truck and plastic bed liner wherein fastening clip made of stainless metal and underside surface of fastening clip was coated by elastic materials.

Technical Field of Invention

[0003] The engineering relates to the fastening clip for holding plastic bed liner together with tray of pickup truck. Particularly with bed liner of pickup truck which had outside protrusive tray characterized, which in fastening need not boring the tray of truck for convenient holding.

Background of Invention

[0004] In consideration of pickup truck was more popular holding plastic bed liner together with tray of pickup truck. But pickup truck had different designing in each brand, cause to plastic bed liner holding problem. Because of the conventional holding need to bore the tray body and thereafter may cause to rust problem.

[0005] Plastic bed liner holding together with tray of pickup truck of this invention was tried to solve the tray boring problem, and this invention is suitable for pickup truck which in had designed with side protrusive tray and clip for fastening plastic bed liner had small size, convenient in holding and had strength in clipping.

[0006] Pickup truck which had designed side protrusive tray, cause to small clipping space for fastening plastic bed liner. Therefore, in designing clip for fastening like U-shaped form in arranging between tray of the truck and plastic bed liner is appropriated designing.

Brief Description of Drawings

[0007]

Figs. 1 is the view to demonstrate the holding clip for fastening plastic bed liner together with tray of pickup truck according to this invention.

Figs. 2 is the side view of the fastening clip

Figs. 3 is the front view of the fastening clip.

Figs. 4 is the top view of the fastening clip

Figs. 5 is the three dimensional view of the fastening clip, is held with the tray of pickup truck and plastic bed liner.

15 Description of Invention

[0008] **Figs. 1** shown the position of fastening clip for holding plastic bed liner together with tray of truck according to this invention. These was used for holding side edge of pickup truck which had side protrusion at outside of pickup tray type.

[0009] Fastening clip made of stainless metal and is coated by elastic materials, by arranging between the tray of truck and plastic bed liner without boring the tray, it was holding at edging side of the tray of truck, places ranging distance in appropriated around four sports each side.

[0010] **Figs. 2** is the side view of fastening clip comprises upper plate 5 and central of upper spacer 5, is arranged by having protrusive hole 6, had thickness equal to plastic bed liner 17, which side of Protrusive hole 6, to put on screw for threading screw 14, and spacer 15, and one end of upper surface 5, had a protrusive part 4, was connected protrusive angular downward with upper surface 5, and protrusive part 4 will bend underside, by having curve 3 and 2 characterized like U-shaped.

[0011] In order to fastening clip for holding tray of truck and underside surface of fastening clip will arrange by elastic material 7.

[0012] **Figs. 3** is the clear illustrated front view of fastening clip, showing protrusive hole 6, characterized underside as protrusive screw for threading pass bored plastic bed liner with diameter equal to protrusive hole 6 and protrusive hole was threaded pass plastic bed liner 17, and was fastened by screw for U-shaped part is hooked with the tray edge.

[0013] **Figs. 5** is the enlarge view shown fastening clip holding is assembled with tray of truck together with plastic bed liner 17, which at edge of tray 13, is protrusive outside of truck body. Fastening clip 1 is arranged between tray edge 13 and plastic bed liner 17. Where at the end of part of fastening clip like U-shaped, underside bent respect to edge of tray 13, upper part of fastening tray had protrusive hole threaded pass plastic bed liner 17, the height of protrusive hole 6, is equal to plastic bed liner thickness. And it had spacer 15, and screw 14 for fastening clip through protrusive hole 6. Un-

derside surface area of fastening clip 1 will has elastic materials is coated.

Best Mode of Invention

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[0014] The same as described in the description of invention.

Claims

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- 1. Fastening clip for holding together with plastic bed liner of pickup truck comprises upper surface (5) wherein central upper surface is arranged being protrusive hole (6) protrusion from upper surface (5) and one side end of upper surface (5) had protrusion (4) is angular protrusion with upper surface (5) and end of protrusive part (4) will bend like U-shaped form (3) for fastening clip the outside edge of pickup tray, and underside of fastening clip was coated of elastic materials 7. 15 20
- 2. Fastening clip according to claim 1, wherein protrusive hole (6) had the height equal to plastic bed liner. 25
- 3. Fastening clip according to claim 1, wherein protrusive hole (6) to put on screw for threading Screw (14) and spacer (15).
- 4. Fastening clip according to claim 1, wherein fastening clip was holding at least one piece at Edging side area of the tray. 30

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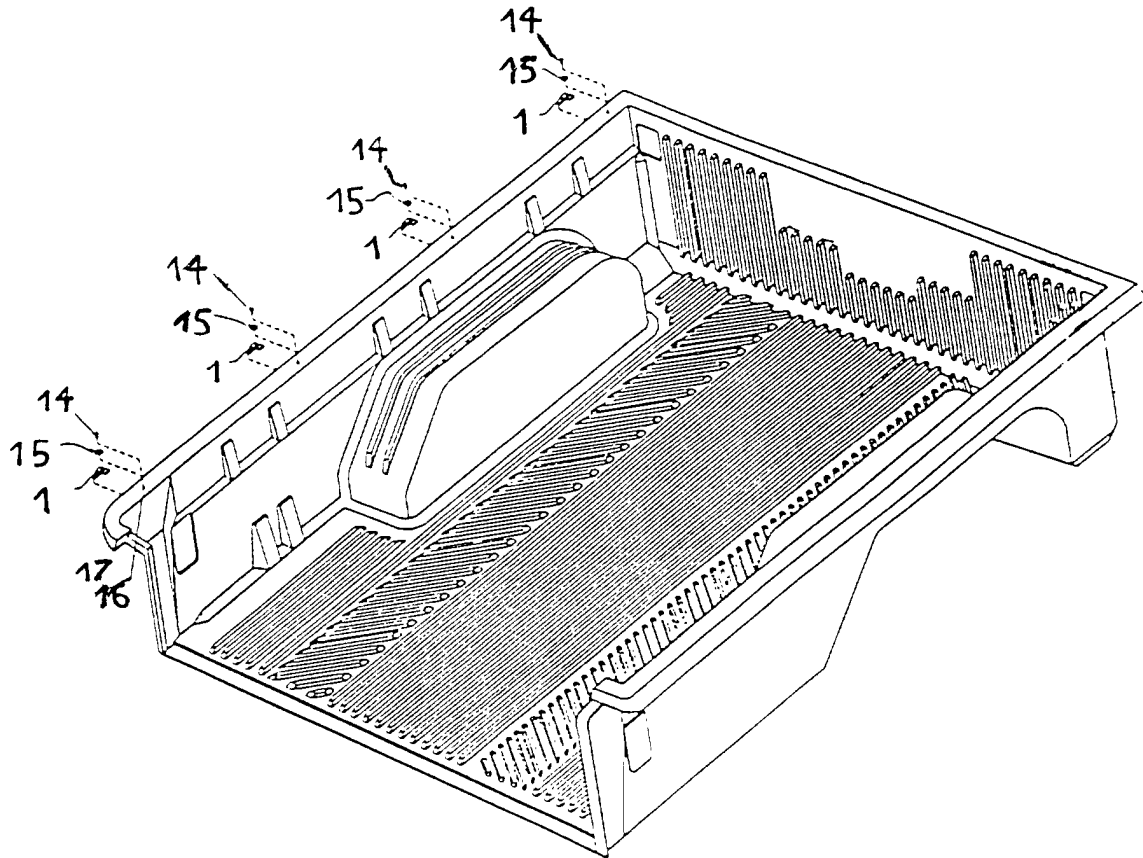


Fig. 1

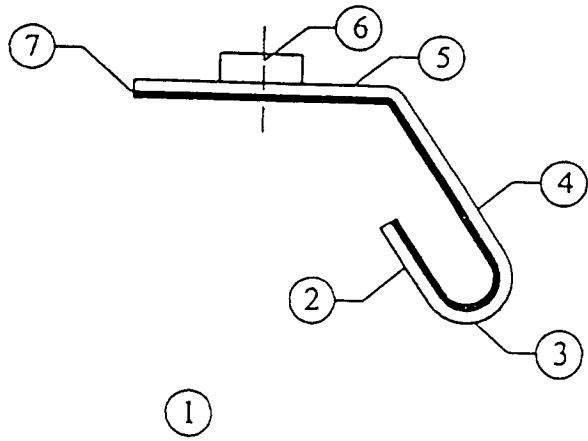


Fig. 2

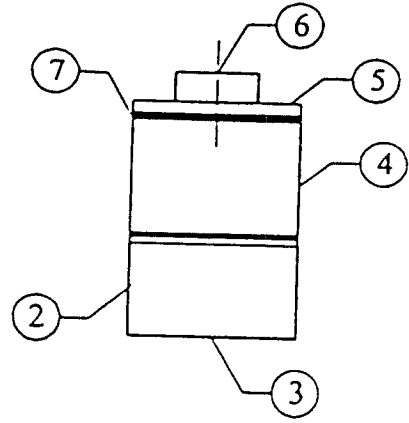


Fig. 3

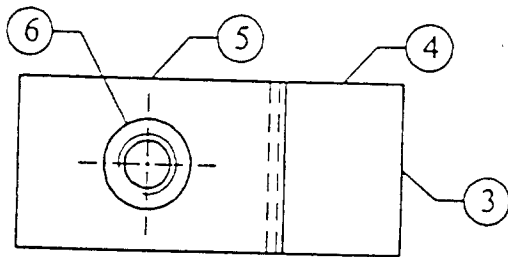


Fig. 4

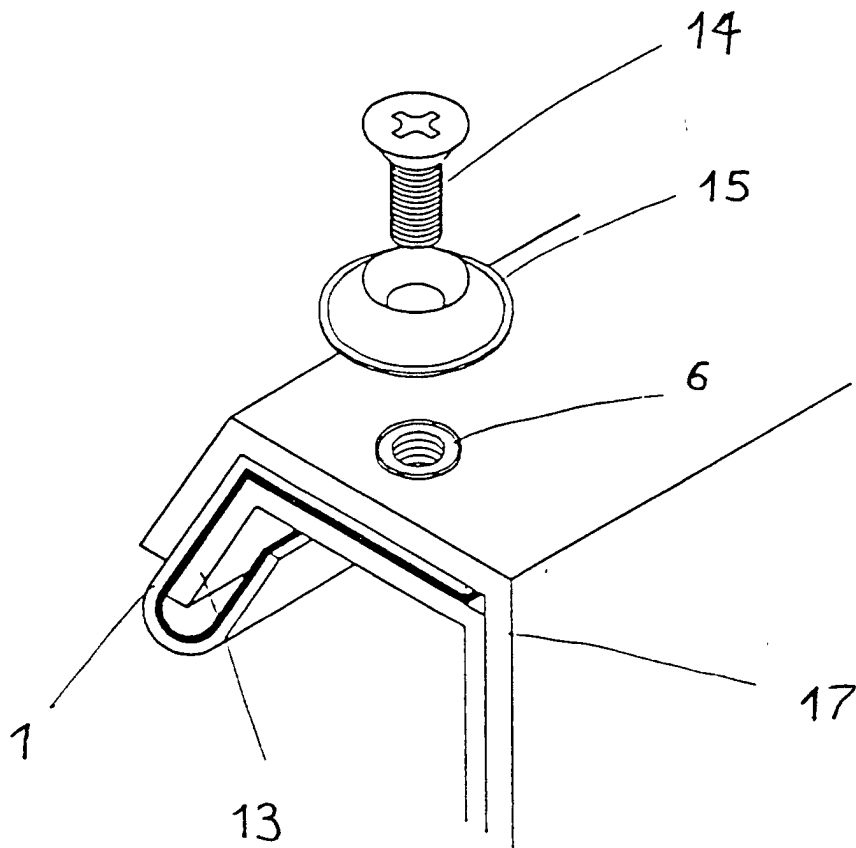


Fig. 5



European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 10 8566

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	US 5 308 133 A (MANGUM CODY ET AL) 3 May 1994 (1994-05-03) * abstract * * column 2, line 22 - line 27 * * column 4, line 11 - column 5, line 68 * * figures 3-6 * -----	1	F16B5/06
A	US 2 869 921 A (R.ADELL) 20 January 1959 (1959-01-20) * column 2, line 49 - line 60 * * figure 3 * -----	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			F16B B60R
Place of search	Date of completion of the search	Examiner	
THE HAGUE	20 September 2000	Granger, H	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 00 10 8566

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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20-09-2000

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US 2869921 A	20-01-1959	NONE	

EPO FORM P0459

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