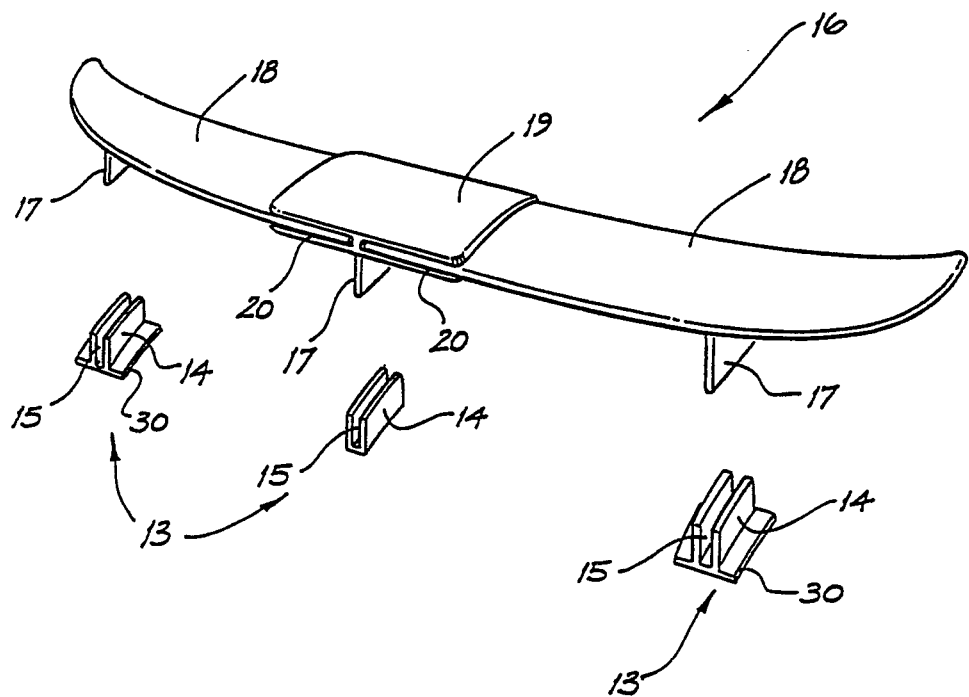




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/AU90/00559 (22) International Filing Date: 20 November 1990 (20.11.90) (30) Priority data: PJ 7474 20 November 1989 (20.11.89) AU (71)(72) Applicant and Inventor: PRESTON, John, Clement [AU/AU]; 3 Fariola Street, Silverwater, NSW 2141 (AU). (74) Agent: SPRUSON & FERGUSON; GPO Box 3898, Sydney, NSW 2001 (AU). (81) Designated States: AT, AT (European patent), AU, BB, BE (European patent), BF (OAPI patent), BG, BJ (OAPI patent), BR, CA, CF (OAPI patent), CG (OAPI patent), CH, CH (European patent), CM (OAPI patent), DE, DE (European patent), DK, DK (European patent), ES, ES (European patent), FI, FR (European patent), GA (OAPI patent), GB, GB (European patent), GR, GR (European patent), HU, IT (European patent), JP, KP, KR, LK, LU, LU (European patent), MC, MG, ML (OAPI patent), MR (OAPI patent), MW, NL, NL (European patent), NO, RO, SD, SE, SE (European patent), SN (OAPI patent), SU, TD (OAPI patent), TG (OAPI patent), US.</p>		<p>Published <i>With international search report.</i></p>

(54) Title: A VEHICLE SUN VISOR



(57) Abstract

A vehicle sun visor (10) is adapted to be attached to the window (11) and not to the gutter of a vehicle. The visor (10) includes one or more supports (13) which are adapted to be secured to the glass window or windscreen (11). A visor member (16) has at least one integral mounting portion (17) which is adapted to engage the support (13). The visor may be tailored to suit a variety of vehicles.

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Field of the Invention

The present invention relates to vehicle sun visors.

Background of the Invention

Vehicle sun visors have by necessity been designed to fit specific vehicles. Accordingly a large variety of sun visors are required to fit the large number of different vehicles.

Known sun visors attach to the gutter surrounding the vehicle roof. In currently manufactured vehicles, there is the tendency to eliminate the use of the gutter, accordingly known sun visors cannot be secured in position.

Objects and Summary of the Invention

It is the object of the present invention to overcome or substantially ameliorate the above disadvantages.

It is disclosed herein a vehicle sun visor comprising at least one support adapted to be affixed to a vehicle front or rear glass window; and a visor member of generally sheet configuration to the extend either forward or rearward over the window, said member having at least one mounting portion to engage said support to securely attach the visor member to said support.

Brief Description of the Drawings

A preferred form of the present invention will be now be described by way of example with reference to the accompanying drawings wherein:

Figure 1 is a schematic perspective view of the front windshield area of a motor vehicle, with a sun visor applied thereto;

Figure 2 is a schematic parts exploded view of the sun visor of Figure 1;

Figure 3 is a schematic side elevation of the vehicle and sun visor of Figure 1;

Figure 4 is a schematic parts exploded view of a visor member employed in the visor of Figure 1;

Figure 5 is a schematic front elevation of a portion of the visor of Figure 1; and

Figure 6 is a schematic side elevation of the visor of Figure 1 during assembly.

Best Mode and Other Embodiments of the Invention

In the accompanying Figs 1-6 there is schematically depicted an example of a sun visor 10 to be installed on the front windscreen 11 of the motor vehicle 12. It should be appreciated that the visor 10 may also be installed on the rear vehicle window.

The visor 10 includes one or more, preferably three supports 13, which are adapted to be secured to the glass window 11 or windscreen. Each support 13 includes a mounting channel portion 14 defining a slot 15 which is to project generally upwardly. The channel 14 may include a base flange 30.

The sun visor 10 also includes a visor member 16 which is of a generally sheet configuration and includes one or more integral mounting fins 17 that fit within the slots 15 and which project from a lower surface of the visor member 16. Threaded fasteners or adhesives may be used to secure the flanges 17 to the supports 13.

The visor member 16 may also include a pair of planar portions 18 and a central adaptor 19 joining the planar portions 18. The adaptor 19 has a pair of side grooves 20 on opposite edges into which the planar portions 18 fit. If so required, the planar portions 18 may be secured to the central adaptor 19 by threaded fasteners or adhesives.

To adjust the visor 10 to the configuration of the particular vehicle, the fins 17 may be cut to the desired length and angle, as can be the planar portions 18, particularly the interior edge which fits in the side groove 20.

It should be appreciated that the invention is not limited by the precise configuration of the channel and mounting fins. More particularly, the configuration of the fin and channel arrangement may be reversed so that the channel and slot 15 are integral with the visor member, planar portion 18 or adaptor 19 with the fin instead being located on a base flange 30. Further the interconnection between the visor member and supports 13 may include hinges or pivots.

Industrial Applicability

The device of the present invention may be fabricated according to conventional manufacturing methods to produce a visor which offers advantages over prior art visors.

CLAIMS

1. A vehicle sun visor comprising:
 - a sheet-like visor member;
 - a mounting portion;
 - at least one mounting portion extending from a lower surface of the visor member;
 - a support adapted to receive at least one mounting portion and be affixed to an automotive windscreen.
2. The visor of claim 1, wherein:
 - the mounting portion is a fin and the support is a channel having a slot formed therein.
3. The visor of claim 1, wherein:
 - the mounting portion is a channel and the support comprises a fin adapted to be received by the channel.
4. The visor of claim 1, further comprising:
 - a second sheet-like visor member; and
 - a central adaptor;
 - the adaptor having two side grooves located on opposite edges thereon for receiving interior edges of the visor members.
5. The visor of claim 4, wherein:
 - the central adaptor further comprises a second mounting portion;
 - a second support is provided for receiving the second mounting portion;
 - the second mounting portion is adapted to be affixed to an automotive windscreen.
6. A vehicle sun visor comprising:
 - a central adaptor having a fin and also having side grooves formed in opposing edges;
 - a support for receiving the fin and adapted to be affixed to an automotive windscreen;
 - two sheet-like visor members having interior edges which fit within the side grooves.
7. The visor of claim 6, wherein:
 - each visor member further comprises a mounting portion extending from a lower surface; and
 - at least two supports are provided for receiving the mounting portions, the supports affixable to an automotive windscreen.

8. A vehicle sun visor comprising:
 - a central adaptor comprising a first mounting portion and having side grooves formed on opposing edges;
 - two sheet-like visor members each having mounting portions extending from a lower surface and an interior edge adapted to be received by a side groove of the adaptor; and
 - three supports, each affixable to an automotive windscreen and each adapted to receive a mounting portion.
9. The visor of any of claims 1-8, wherein:
 - threaded fasteners or adhesives are used to secure a mounting portion to a support.
10. A vehicle visor, substantially as hereinbefore described with reference the drawings.

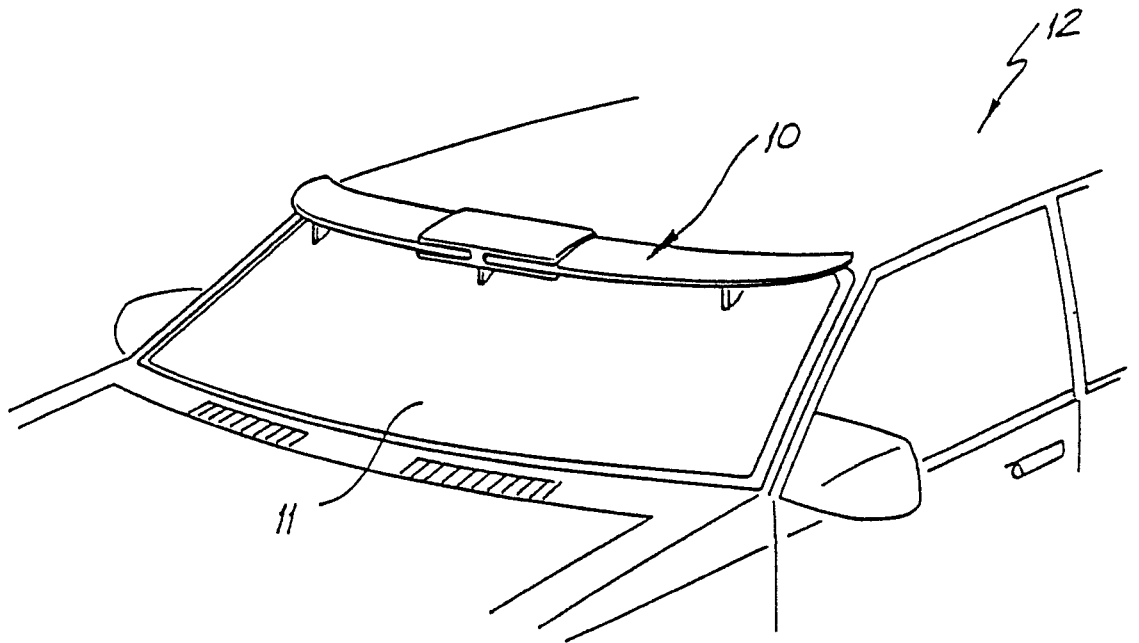


FIG. 1

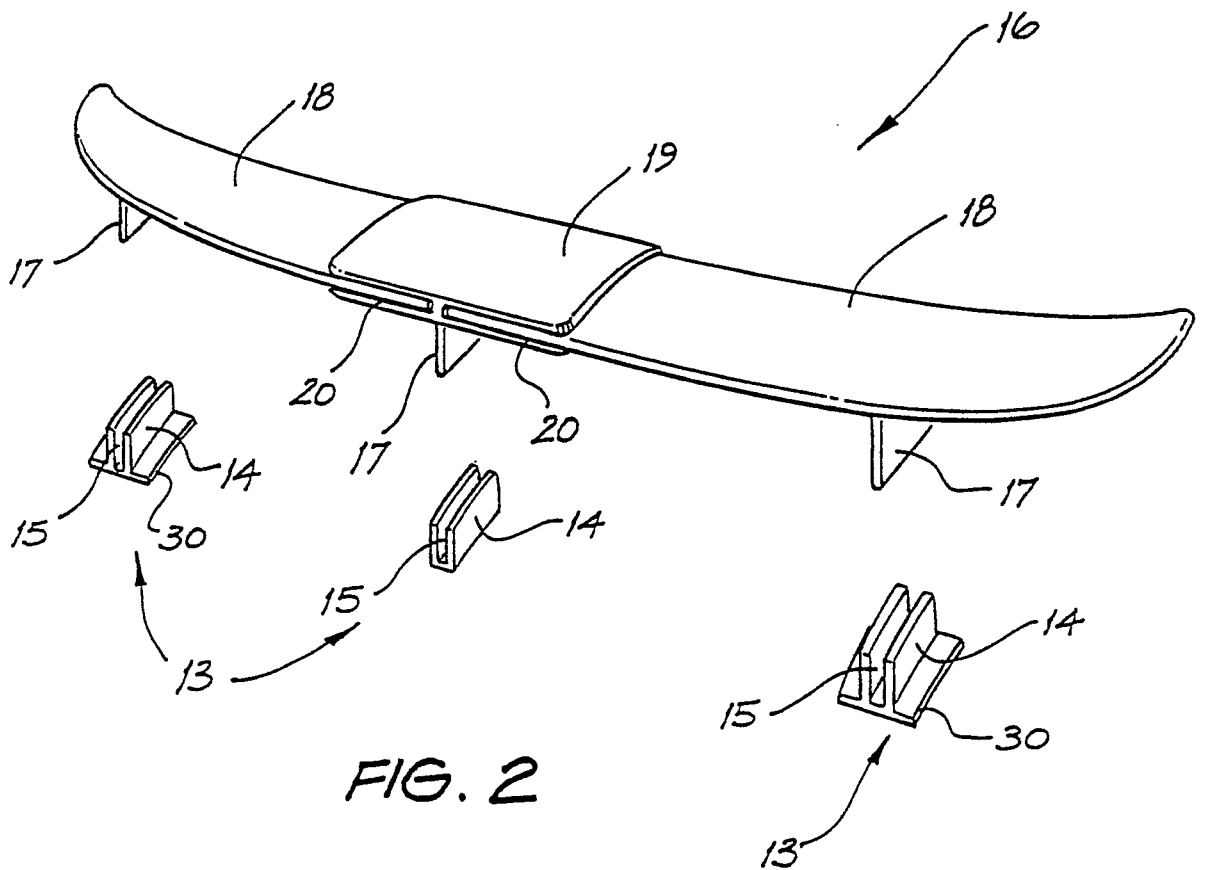


FIG. 2

SUBSTITUTE SHEET

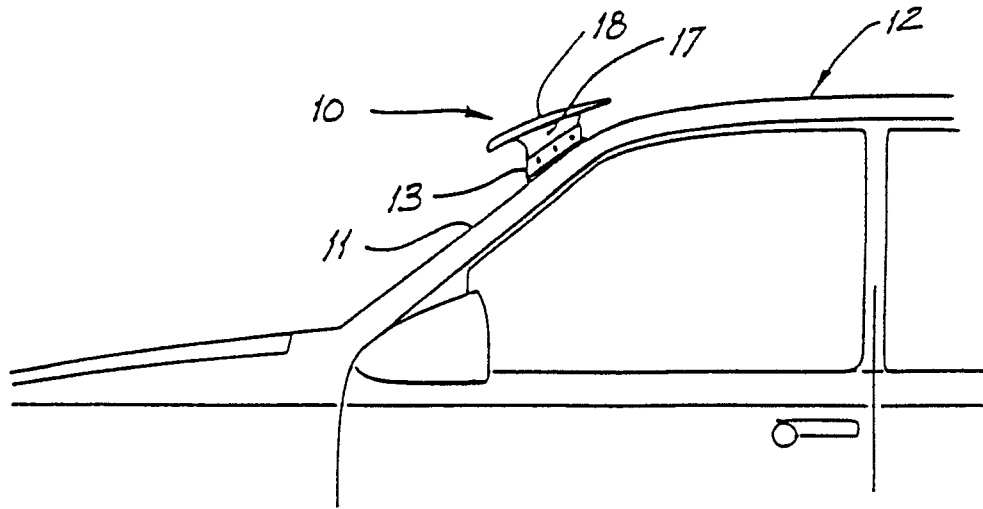


FIG. 3

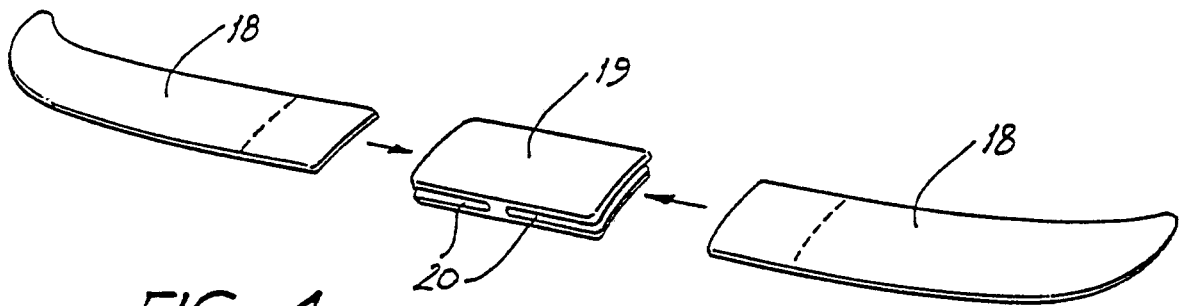


FIG. 4

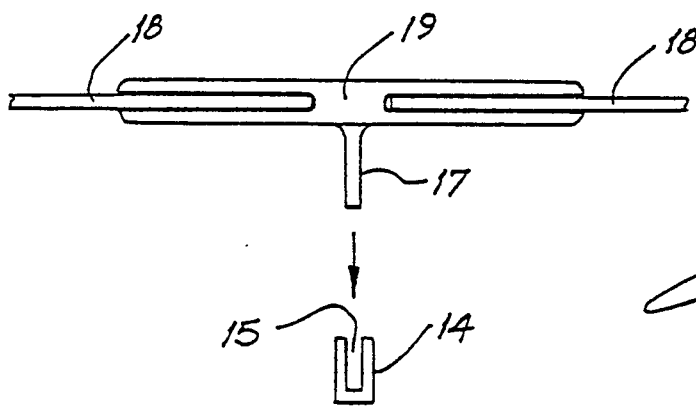


FIG. 5

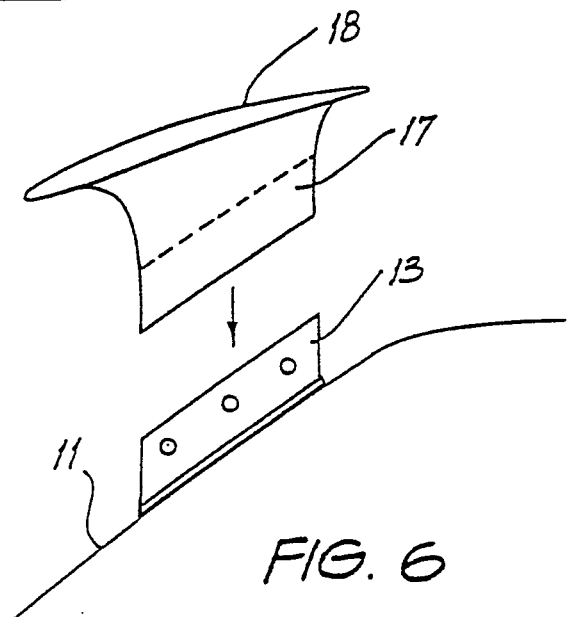


FIG. 6

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INTERNATIONAL SEARCH REPORT

International Application No. **PCT/AU 90/00559**

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) 6				
According to International Patent Classification (IPC) or to both National Classification and IPC				
Int. Cl. ⁵ B60J 3/00				
II. FIELDS SEARCHED				
Minimum Documentation Searched 7				
Classification System	Classification Symbols			
IPC	B60J 3/00			
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched 8				
AU : IPC as above				
III. DOCUMENTS CONSIDERED TO BE RELEVANT 9				
Category*	Citation of Document, with indication, where appropriate, of the relevant passages 12	Relevant to Claim No 13		
X,Y	US,A, 3650559 (POWERS) 21 March 1972 (21.03.72) Column 3 line 53 - Column 4 line 24 & Figs 6-8	(1-9)		
X	US,A, 3481644 (FRANCIS) 2 December 1969 (02.12.69) Column 2 lines 31-46	(1)		
X	US,A, 2785001 (SOUCY) 12 March 1957 (12.03.57) Column 1 line 55 - Column 2 line 6	(1-3)		
X	US,A, 2716572 (SOUCY) 30 August 1955 (30.08.55) Column 1 lines 46-59	(1)		
Y	US,A, 2653050 (ASHCRAFT) 22 September 1953 (22.09.53) Column 1 lines 29-50	(4,5,6,8)		
<p>* Special categories of cited documents: 10</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </td> <td style="width: 50%; border: none;"> <p>"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</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"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.</p> <p>"&" document member of the same patent family</p> </td> </tr> </table>			<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"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.</p> <p>"&" document member of the same patent family</p>
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IV. CERTIFICATION				
Date of the Actual Completion of the International Search 19 February 1991 (19.02.91)	Date of Mailing of this International Search Report 25 February 1991			
International Searching Authority Australian Patent Office	Signature of Authorized Officer P.J. WHITE			