REAR-VIEW MIRROR PROTECTING COVER

A rear view mirror protective cover includes a main body (11) made of an elastic material and a trimmed edge (12) arranged at one end of the main body that is folded towards the inside of said cover. Another end of the main body opposite to the trimmed edge is in the shape of a circular arc. The main body includes a mirror opening (13), also formed with a trimmed edge (14), that is arranged to accommodate a rear view mirror. Securing bands (15) are arranged on the trimmed edge (14). The elastic material is nylon, lycra or latex. The mirror opening (13) is square or elliptic in shape. The protective cover is suitable for various kinds of rear view mirror due to its use of elastic material. The trimmed edge (12) can effectively prevent the cover from sliding from the rear view mirror. The cover can effectively protect the rear view mirror from external scuffing and damage caused by collision.

Fig. 1
Description


FIELD OF THE INVENTION

[0002] The invention relates to a protective cover, in particular to a rear view mirror protective cover.

BACKGROUND OF THE INVENTION

[0003] The current design of rear view mirrors of various types equipped on vehicles all extends out of the bodies of vehicles, as such the rear view mirrors are easily scraped. To avoid this problem, a protective cover is mounted on the rear view mirror, so as to prevent it from being scraped.

[0004] Current protective covers are mainly formed in three forms: 1) hard shell housing having a fixed shape, 2) sticking film and 3) fabric cover. Each of them has disadvantages. For the hard shell housing having a fixed shape, since the different types of vehicles have different rear view mirrors, it is necessary to have a custom designed mold for each type of rear view mirror, resulting in a high cost and a difficulty in mounting and removing, and lacking the universality. For the sticking film, since the surface of the rear view mirror housing is generally of an arc shape, the sticking film may be poorly attached to the mirror surface with a feeling of roughness, and stains which are difficultly removed may be left on the mirror housing surface after the sticking film is tore down. For the fabric cover, it is necessary to design a special paper pattern and make a special cut for each type of rear view mirror. Due to the lack of the universality, one protective cover cannot match with rear view mirrors having various sizes, and it may even cover a portion of a mirror surface, resulting in a potential safety problem.

[0005] In sum, the above three solutions of a protective cover all have the disadvantage of lacking the universality.

SUMMARY OF THE INVENTION

[0006] In view of this, the present invention provides a side-view mirror protective cover which can solve the problem of lacking the universality.

[0007] In order to solve the above problems, the present invention provides a rear view mirror protective cover, which includes a main body made of elastic material. A trimmed edge folded towards the inside of the protective cover is provided at one end of the main body. The other end of the main body opposite to the trimmed edge is of an arc shape. The main body has a mirror surface opening for the rear view mirror, and the mirror surface opening is provided with a trimmed edge.

[0008] Preferably, the elastic material is nylon, lycra or latex.

[0009] Preferably, the shape of the mirror surface opening is rectangle or ellipse.

[0010] Preferably, the dimension of the trimmed edge at the opening may be larger than or equal to that of the opposite arc end.

[0011] Preferably, securing bands are provided on the trimmed edge.

[0012] Preferably, the trimmed edge is formed by 3 to 5 needles overlocked stitches using an elastic thread.

[0013] The protective cover according to the present invention may be applied to rear view mirrors of various types of vehicles due to its use of elastic material. The trimmed edge at the mirror opening of the protective cover may effectively prevent the protective cover from sliding off the rear view mirror housing. The protective cover may effectively avoid the rear view mirror from being damaged by the external scraping, collision and various accidents.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] Fig. 1 is a front view of an embodiment; and

[0015] Fig.2 is a rear view of the embodiment.

DETAILED DESCRIPTION

[0016] Hereinafter, the technical solutions of the present invention will be described in details by means of the preferred embodiment described below and in conjunction with the drawings.

[0017] Referring to Fig.1, Fig1 is a front view of an embodiment, viewing from the front of a protective cover. A main body 11 of the protective cover has an opening at one end thereof, and a trimmed edge 12 is provided at the opening. The trimmed edge 12 is formed by folding towards the inside of the protective cover. The other end of the main body 11 of the protective cover is of an arc shape so as to match with the contour of the mirror housing. A mirror surface opening 13 having the shape of ellipse is provided on the main body 11, and a trimmed edge 12 is provided at the mirror opening 13. The mirror opening 13 may also be of a rectangular shape so as to match with the shape of the mirror surface of the rear view mirror of a vehicle. The trimmed edges 12 and 14 are formed in a special manner, that is, the trimmed edges are made by 3 to 5 needles overlocked stitches using an elastic thread.

[0018] Fig.2 is a rear view of the embodiment, viewing from the rear of a protective cover. The front and rear parts of the main body 11 may be of an integral structure. Alternatively, the main body 11 may be composed of two separate front and rear parts that are seamed together.

[0019] The material of the protective cover may be a variety of elastic material, such as nylon, lycra, latex and...
Securing bands 15 are provided on the trimmed edge 14. The number of the securing bands 15 may be two or more. Due to the elastic material of the protective cover, when the protective cover is mounted on the rear view mirror, the trimmed edge 14 can be easily pulled inside the gap between the mirror frame and the mirror housing under the guiding of the securing bands 15, so as to make the main body 11 of the protective cover abut against the housing of the rear view mirror closely. The two securing bands 15 on the trimmed edge 14 allow the excessive portion of the protective cover which may otherwise cover the mirror surface to be drawn inside the gap between the mirror frame and the mirror housing, which can solve the problem that the mirror surface is covered.

The protective cover according to the present invention may be applied to rear view mirrors of various types of vehicles due to elastic material. The trimmed edge 12 at the mirror opening of the protective cover may effectively prevent the protective cover from sliding off the rear view mirror. The protective cover may effectively avoid the rear view mirror from being damaged by the external scraping, collision and various accidents. A propagandistic design may also be printed on the protective cover, so that the rear view mirror of vehicle may become a platform for displaying messages and graphics.

Any modification, equivalent, improvement and the like made to the rear view mirror protective cover according to the embodiment of the invention within the spirits and principles of the present invention should be deemed to fall into the protection scope of the present invention.

Claims

1. A rear view mirror protective cover, characterized by comprising a main body made of elastic material, wherein a trimmed edge folded towards the inside of the protective cover is provided at one end of the main body, the other end of the main body opposite to the trimmed edge is of an arc shape; the main body has a mirror surface opening for the rear view mirror, and the mirror surface opening is provided with a trimmed edge.

2. The rear view mirror protective cover according to claim 1, wherein the elastic material is nylon, lycra or latex.

3. The rear view mirror protective cover according to claim 1, wherein the shape of the mirror surface opening is rectangle or ellipse.

4. The rear mirror protective cover according to claim 1, wherein securing bands are provided on the trimmed edge.

5. The rear view mirror protective cover according to claim 1, wherein the trimmed edge is formed by 3 to 5 needles overlocked stitches using an elastic thread.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER  
see extra sheet

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)

IPC: B66R, B60J

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 database and, where practicable, search terms used)

EPODOC, WPLPAJ, CNPAT: vehicle?, rear, side, extern+, wing, mirror, guard+, safe, secure, protect+, cover, sleeve, hood, shield, flexible, elastic+, strip?, seam?

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>CN 201049609 Y (WJ, Kege) 23 Apr. 2008 (23.04.2008) see page 2, line 13-line 22, figures 1-2</td>
<td>1, 3</td>
</tr>
<tr>
<td>X</td>
<td>US 4834157 A (SMITH, Gerard) 30 May 1989 (30.05.1989) see the whole document</td>
<td>1</td>
</tr>
<tr>
<td>X</td>
<td>CN 2772897 Y (JIN, Guiliang) 19 Apr. 2006 (19.04.2006) see page 2, line 13-line 3, line 11 Figures 1-4</td>
<td>1, 3</td>
</tr>
<tr>
<td>A</td>
<td>CN 2481570 Y (JIA YING PLASTIC &amp; ELECTRONIC FACTORY) 13 Mar. 2002 (13.03.2002) see the whole document</td>
<td>1-5</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:
  "A" document defining the general state of the art which is not considered to be of particular relevance
  "E" earlier application or patent but published on or after the international filing date
  "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)
  "O" document referring to an oral disclosure, use, exhibition or other means
  "P" document published prior to the international filing date but later than the priority date claimed
  "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: 24 Sep. 2009 (24.09.2009)

Date of mailing of the international search report: 15 Oct. 2009 (15.10.2009)

Name and mailing address of the ISA/CN
The State Intellectual Property Office, the P.R. China
6 Xitucheng Rd., Jinen Bridge, Haidian District, Beijing, China 100088
Facsimile No. 86-10-62019451

Form PCTISA/2/10 (second sheet) (July 2009)

Authorized officer: WANG Dongjie
Telephone No. (86-10) 62085602
<table>
<thead>
<tr>
<th>Patent Documents referred in the Report</th>
<th>Publication Date</th>
<th>Patent Family</th>
<th>Publication Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CN 201049609 Y</td>
<td>23.04.2008</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>US 6325121 B1</td>
<td>04.12.2001</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>US 4834157 A</td>
<td>30.05.1989</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>CN 2772897 Y</td>
<td>19.04.2006</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>CN 2481570 Y</td>
<td>13.03.2002</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>DE 20219490 U1</td>
<td>24.04.2003</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SG 60055 A1</td>
<td>22.02.1999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ZA 9803155 A</td>
<td>29.12.1999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NO 994979 A</td>
<td>13.12.1999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EP 0975489 A1</td>
<td>02.02.2000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CN 1252763 A</td>
<td>10.05.2000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>KR 20010006383 A</td>
<td>26.01.2001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JP 2001520598 T</td>
<td>30.10.2001</td>
</tr>
<tr>
<td>A. CLASSIFICATION OF SUBJECT MATTER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B60J11.06  (206.01) i</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B60R1.06   (206.01) i</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Form PCT/ISA/210 (extra sheet) (July 2009)
REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader’s convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

• CN 200810149599 [0001]