



August 5, 2024

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Welocalize Translations

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I, Zhang Deting, a translator fluent in Chinese and English languages, do solemnly and sincerely declare that the following is, to the best of my knowledge and belief, a true, accurate, and correct English translation of CN204360078 in Chinese in a form that reflects the intention and meaning of the original text.

I hereby declare that all statements made herein of my own knowledge are true and that all statements, made on information and belief, are believe to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

A rectangular box containing a handwritten signature in black ink, which appears to read "张德婷" (Zhang Deting).

[Zhang Deting]

Project Number: [Project # MFIP_2407_P0105]

15 W. 37th Street 4th Floor
New York, NY 10018
212.581.8870

EXHIBIT A



(12) 实用新型专利

(10) 授权公告号 CN 204360078 U

(45) 授权公告日 2015. 05. 27

(21) 申请号 201420858645. 4

(22) 申请日 2014. 12. 30

(73) 专利权人 深圳市锐仁电子有限公司

地址 518057 广东省深圳市南山区朗山一路
5 号超力通大厦 601 室

(72) 发明人 王志龙

(74) 专利代理机构 北京科亿知识产权代理事务
所(普通合伙) 11350

代理人 汤东风

(51) Int. Cl.

G03B 17/02(2006. 01)

G03B 17/55(2006. 01)

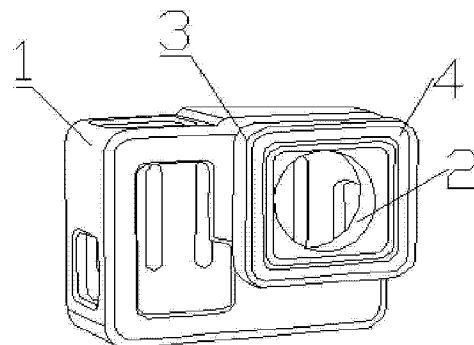
权利要求书1页 说明书2页 附图3页

(54) 实用新型名称

一种带抽拉后盖的 GOPRO 运动相机散热保护壳

(57) 摘要

本实用新型公开了一种带抽拉后盖的 GOPRO 运动相机散热保护壳,包括金属前壳,所述金属前壳前侧依次设置有镜头支架、镜头框和镜片,所述金属前壳背面为开口结构,所述金属前壳后侧设置有可抽拉的金属后盖。本实用新型的目的在于提供一种能够全面保护 GOPRO 运动相机镜头,带抽拉式金属后盖,能够对 GOPRO 相机背部保护和散热良好,并且组装简易方便的带抽拉后盖的 GOPRO 运动相机保护外壳。



1. 一种带抽拉后盖的 GORPO 运动相机散热保护壳,其特征在于:包括金属前壳,所述金属前壳前侧依次设置有镜头支架、镜头框和镜片,所述金属前壳背面为开口结构,所述金属前壳后侧设置有可抽拉的金属后盖。

2. 根据权利要求 1 所述的带抽拉后盖的 GORPO 运动相机散热保护壳,其特征在于:所述金属前壳背面的上边框和下边框上均设置有水平导轨。

3. 根据权利要求 1 或 2 所述的带抽拉后盖的 GORPO 运动相机散热保护壳,其特征在于:所述金属后盖的上边框和下边框能够与所述金属前壳背面的上边框和下边框上设置的水平导轨匹配抽拉。

4. 根据权利要求 3 所述的带抽拉后盖的 GORPO 运动相机散热保护壳,其特征在于:所述金属后盖靠近拉手部位的上边框和下边框外侧壁上均设置有凸起。

5. 根据权利要求 4 所述的带抽拉后盖的 GORPO 运动相机散热保护壳,其特征在于:所述金属前壳背面的上边框和下边框上设置的水平导轨内的相应位置均设置有与所述凸起匹配卡紧的凹槽。

一种带抽拉后盖的 GOPRO 运动相机散热保护壳

技术领域

[0001] 本实用新型涉及一种相机保护壳,特别是涉及一种带抽拉后盖的 GOPRO 运动相机散热保护壳。

背景技术

[0002] 目前户外运动流行催动运动相机行业很火爆。GOPRO 运动相机是目前市场上销售最好的。在长时间拍摄的情况下,相机容易发热。目前的边框和防水外壳不能解决这个问题。而且对相机保护不够全面,镜头和后背都缺乏保护。

发明内容

[0003] 本实用新型要解决的技术问题是提供一种能够全面保护 GOPRO 运动相机镜头,带抽拉式金属后盖,能够对 GOPRO 相机背部保护和散热良好,并且组装简易方便的带抽拉后盖的 GOPRO 运动相机散热保护壳。

[0004] 为达上述目的,本实用新型一种带抽拉后盖的 GOPRO 运动相机散热保护壳,包括金属前壳,所述金属前壳前侧依次设置有镜头支架、镜头框和镜片,所述金属前壳背面为开口结构,所述金属前壳后侧设置有可抽拉的金属后盖。

[0005] 其中所述金属前壳背面的上边框和下边框上均设置有水平导轨。

[0006] 其中所述金属后盖的上边框和下边框能够与所述金属前壳背面的上边框和下边框上设置的水平导轨匹配抽拉。

[0007] 其中所述金属后盖靠近拉手部位的上边框和下边框外侧壁上均设置有凸起。

[0008] 其中所述金属前壳背面的上边框和下边框上设置的水平导轨内的相应位置均设置有与所述凸起匹配卡紧的凹槽。

[0009] 本实用新型一种带抽拉后盖的 GOPRO 运动相机散热保护壳与现有技术不同之处在于本实用新型去得了如下的技术效果:

[0010] 1、有镜头保护框和镜片,对镜头的保护更加全面;

[0011] 2、带金属抽拉式后盖,能够对 GOPRO 相机背部保护和散热良好;

[0012] 3、组装简易方便。只需把相机放入前壳,然后插上后盖即可。

[0013] 下面结合附图对本实用新型作进一步说明。

附图说明

[0014] 图 1 为本实用新型带抽拉后盖的 GOPRO 运动相机散热保护壳的结构示意图;

[0015] 图 2 为本实用新型带抽拉后盖的 GOPRO 运动相机散热保护壳的正视图;

[0016] 图 3 为本实用新型带抽拉后盖的 GOPRO 运动相机散热保护壳的俯视图;

[0017] 图 4 为本实用新型带抽拉后盖的 GOPRO 运动相机散热保护壳的左视图;

[0018] 图 5 为本实用新型带抽拉后盖的 GOPRO 运动相机散热保护壳的右视图;

[0019] 图 6 为本实用新型带抽拉后盖的 GOPRO 运动相机散热保护壳的仰视图;

- [0020] 图 7 为本实用新型带抽拉后盖的 GOPRO 运动相机散热保护壳的后视图；
- [0021] 图 8 为本实用新型带抽拉后盖的 GOPRO 运动相机散热保护壳的结构爆炸图；
- [0022] 图 9 为本实用新型带抽拉后盖的 GOPRO 运动相机散热保护壳的组装示意图；
- [0023] 图 10 为本实用新型带抽拉后盖的 GOPRO 运动相机散热保护壳的安装展示图。
- [0024] 附图标记说明：1- 金属前壳；2- 镜头支架；3- 镜头框；4- 镜片；5-GOPRO 运动相机；6- 金属后盖。

具体实施方式

[0025] 以下结合附图和实施例，对本实用新型上述的和另外的技术特征和优点作更详细的说明。

[0026] 于一实施例中，如图 1 和图 8 所示，本实用新型一种带抽拉后盖的 GOPRO 运动相机散热保护壳，包括金属前壳 1，金属前壳 1 前侧依次设置有镜头支架 2、镜头框 3 和镜片 4，金属前壳 1 背面为开口结构，金属前壳 1 后侧设置有可抽拉的金属后盖 6。

[0027] 其中金属前壳 1 背面的上边框和下边框上均设置有水平导轨；金属后盖 6 的上边框和下边框能够与所述金属前壳 1 背面的上边框和下边框上设置的水平导轨匹配抽拉。金属后盖 6 靠近手拉部位的上边框和下边框外侧壁上均设置有凸起；金属前壳 1 背面的上边框和下边框上设置的水平导轨内的相应位置均设置有与所述凸起匹配卡紧的凹槽。

[0028] 使用时，如图 9 和图 10 所示，将镜头支架 2、镜头框 3 和镜片 4 依次安装到金属前壳前侧的对应位置，或者提前组装好上述部件，然后将 GOPRO 运动相机 5 从金属前壳 1 的背面开口正确位置放进去，最后把金属后壳 6 沿着金属前壳 1 背面的水平导轨轻轻插进去，当听到“咔哒”一声，表示金属后盖 6 的凸起和金属前壳 1 导轨内的凹槽匹配卡合，完成组装。

[0029] 以上所述的实施例仅仅是对本实用新型的优选实施方式进行描述，并非对本实用新型的范围进行限定，在不脱离本实用新型设计精神的前提下，本领域普通技术人员对本实用新型的技术方案作出的各种变形和改进，均应落入本实用新型权利要求书确定的保护范围内。

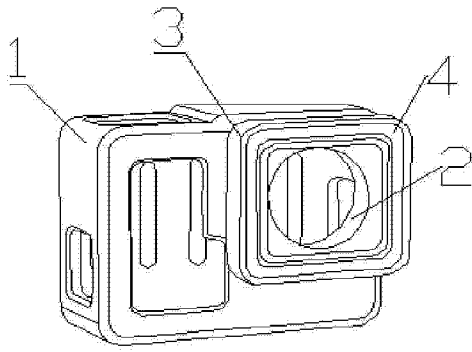


图 1

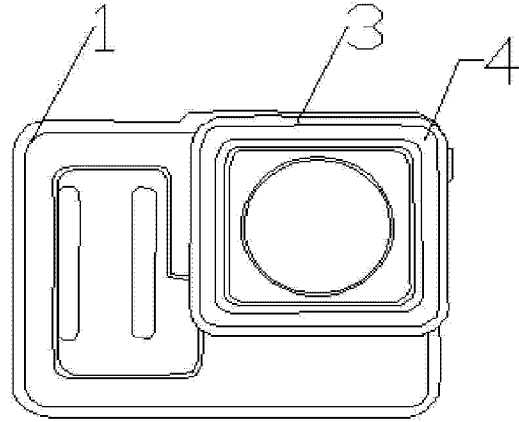


图 2

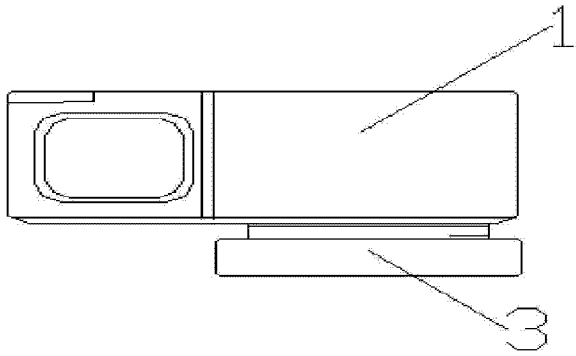


图 3

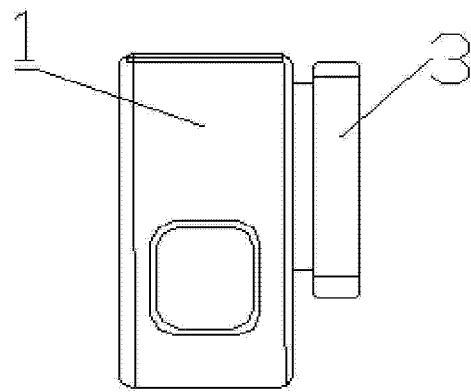


图 4

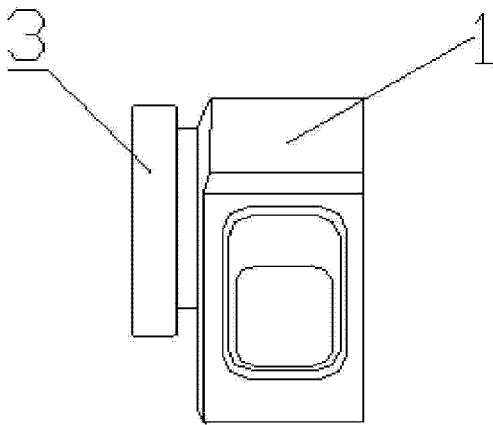


图 5

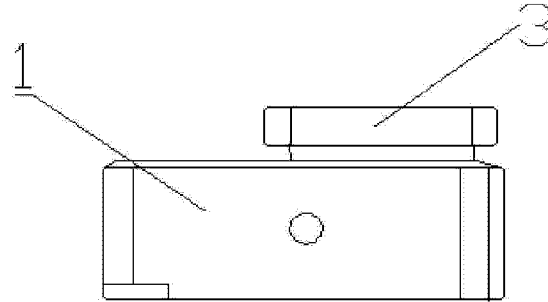


图 6

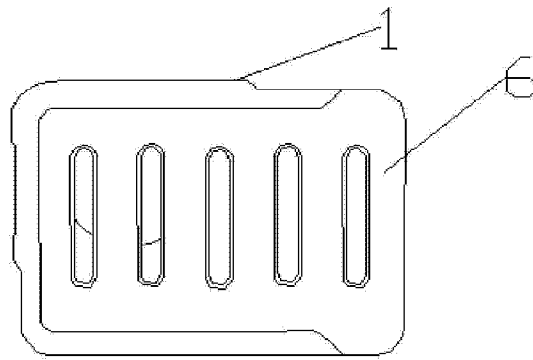


图 7

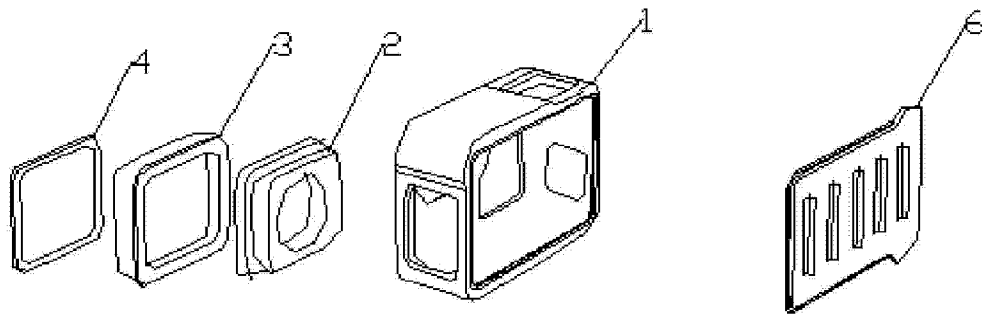


图 8

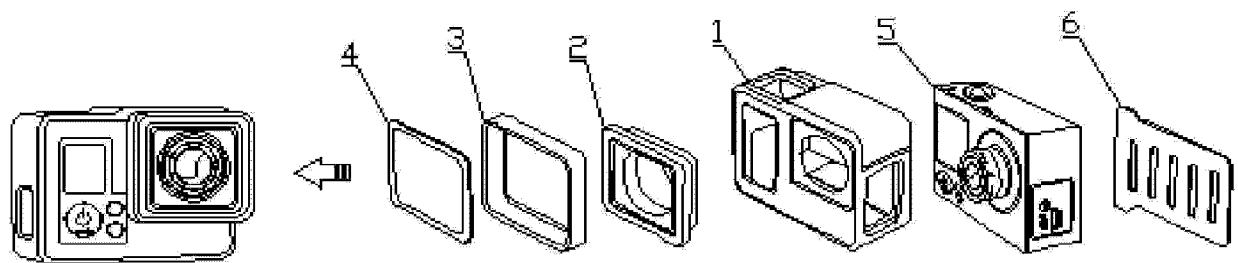


图 9

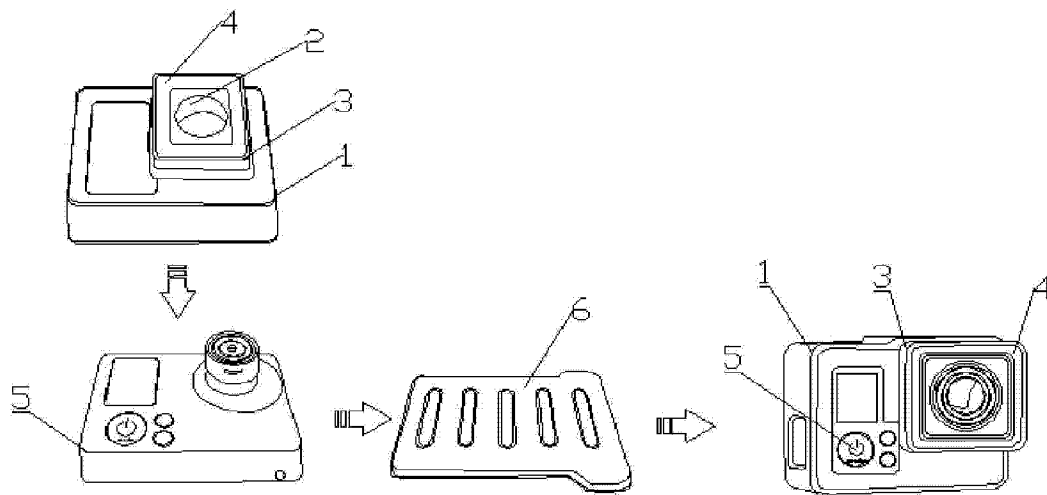


图 10

EXHIBIT B



(12) Utility Model Patent



(10) Publication Number: CN 204360078 U

(45) Publication Date: 2015. 05. 27

(21) Application Number: 201420858645.4

(22) Filing Date: 2014. 12. 30

(73) Patentee: Shenzhen Ruiren Electronics
Co., Ltd.

Address: Room 601, Chaolitong
Building, No. 5 Langshan
1st Road, Nanshan District,
Shenzhen, Guangdong
518057

(72) Inventor: Wang Zhilong

(74) Patent Agency: Beijing Keyi Intellectual
Property Agency
(General Partnership)
11350

Agent: Tang Dongfeng

(51) Int. Cl.

G03B 17/02(2006.01)

G03B 17/55(2006.01)

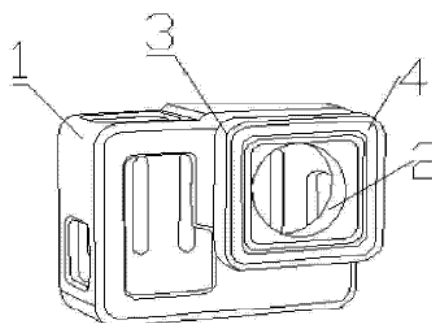
Claims (1 page) Description (4 pages) Drawings (3 pages)

(54) Title

GORPO sport camera heat dissipation
protection housing provided with push-pull
rear cover

(57) Abstract

The utility model discloses a GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover. The GORPO sport camera heat dissipation protection housing comprises a metal front housing, the front side of which is sequentially provided with a lens holder, a lens frame, and a lens. The back surface of the metal front housing is provided with an opening structure, and the rear side of the metal front housing is provided with a push-pull metal rear cover. The utility model aims to provide the GORPO sport camera heat dissipation protection housing which is advantageous in that the GORPO sport camera lens can be protected comprehensively, the push-pull metal rear cover can well protect the back part of the GORPO camera, the heat dissipation effect is good, and the assembly is simple and convenient.



Claims

1. A GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover, comprising a metal front housing, the front side of which being sequentially provided with a lens holder, a lens frame, and a lens, the back surface of the metal front housing being provided with an opening structure, and the rear side of the metal front housing being provided with a push-pull metal rear cover.

2. The GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover according to claim 1, wherein the upper and lower borders on the back surface of the metal front housing are provided with horizontal guide rails.

3. The GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover according to claim 1 or 2, wherein the upper and lower borders of the metal rear cover are matched with the horizontal guide rails arranged on the upper and lower borders on the back surface of the metal front housing to be pushed and pulled.

4. The GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover according to claim 3, wherein the outer side walls of the upper and lower borders of the metal rear cover close to a handle position are provided with protrusions.

5. The GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover according to claim 4, wherein grooves that are matched and clamped with the protrusions are formed in the corresponding positions within the horizontal guide rails arranged on the upper and lower borders on the back surface of the metal front housing.

GORPO Sport Camera Heat Dissipation Protection Housing Provided with Push-pull Rear Cover

Technical Field

[0001] The utility model relates to a camera protection housing, and in particular relates to a GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover.

Background

[0002] The current popularity of outdoor sports has driven the bloom of the sport camera industry. GOPRO sport cameras are currently the best-selling in the market. In the case of long-term shooting, a camera is prone to overheating. The current borders and waterproof housings cannot solve the problem. Moreover, the protection is not comprehensive enough for a camera, the lens and back part of which lack protection.

Summary

[0003] The technical problem to be solved by the utility model is to provide a GORPO sport camera heat dissipation protection housing which is advantageous in that the GOPRO sport camera lens can be protected comprehensively, a push-pull metal rear cover is provided and can well protect the back part of the GORPO camera, the heat dissipation effect is good, and the assembly is simple and convenient.

[0004] To achieve the above objective, the utility model provides a GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover. The GORPO sport camera heat dissipation protection housing includes a metal front housing, the front side of which is sequentially provided with a lens holder, a lens frame, and a lens. The back surface of the metal front housing is provided with an opening structure, and the rear side of the metal front housing is provided with a push-pull metal rear cover.

[0005] The upper and lower borders on the back surface of the metal front housing are provided with horizontal guide rails.

[0006] The upper and lower borders of the metal rear cover are matched with the horizontal guide rails arranged on the upper and lower borders on the back surface of the metal front housing to be pushed and pulled.

[0007] The outer side walls of the upper and lower borders of the metal rear cover close to a handle position are provided with protrusions.

[0008] Grooves that are matched and clamped with the protrusions are formed in the corresponding positions within the horizontal guide rails arranged on the upper and lower borders on the back surface of the metal front housing.

[0009] Compared with the prior art, the GORPO sport camera heat dissipation

protection housing provided with a push-pull rear cover as described in the utility model achieves the following technical effects:

[0010] 1. A lens protection frame and a lens are provided, which provide more comprehensive protection for the lens.

[0011] 2. A metal push-pull rear cover is provided, which can provide good protection and heat dissipation for the back part of the GORPO camera.

[0012] 3. The assembly is easy and convenient, which can be achieved by simply placing the camera in the front housing and then inserting the rear cover.

[0013] The utility model will be further described below in conjunction with the accompanying drawings.

Brief Description of Drawings

[0014] FIG. 1 is a schematic structural diagram of the GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover as described in the utility model.

[0015] FIG. 2 is a front view of the GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover as described in the utility model.

[0016] FIG. 3 is a top view of the GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover as described in the utility model.

[0017] FIG. 4 is a left view of the GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover as described in the utility model.

[0018] FIG. 5 is a right view of the GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover as described in the utility model.

[0019] FIG. 6 is a bottom view of the GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover as described in the utility model.

[0020] FIG. 7 is a rear view of the GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover as described in the utility model.

[0021] FIG. 8 is a structural exploded view of the GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover as described in the utility model.

[0022] FIG. 9 is an assembly schematic diagram of the GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover as described in the utility model.

[0023] FIG. 10 is an installation exploded view of the GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover as described in the utility model.

[0024] Explanation of Symbols: 1-Metal front housing; 2-Lens holder; 3-Lens frame; 4-Lens; 5-GOPRO sport camera; 6-Metal rear cover.

Detailed Description

[0025] The following will provide a more detailed explanation of the above and other technical features and advantages of the utility model, in conjunction with the accompanying drawings and embodiments.

[0026] In an embodiment, as shown in FIG. 1 and FIG. 8, the utility model provides a GORPO sport camera heat dissipation protection housing provided with a push-pull rear cover. The GORPO sport camera heat dissipation protection housing includes a metal front housing 1, the front side of which is sequentially provided with a lens holder 2, a lens frame 3, and a lens 4. The back surface of the metal front housing 1 is provided with an opening structure, and the rear side of the metal front housing 1 is provided with a push-pull metal rear cover 6.

[0027] The upper and lower borders on the back surface of the metal front housing 1 are provided with horizontal guide rails. The upper and lower borders of the metal rear cover 6 are matched with the horizontal guide rails arranged on the upper and lower borders on the back surface of the metal front housing 1 to be pushed and pulled. The outer side walls of the upper and lower borders of the metal rear cover 6 close to a handle position are provided with protrusions. Grooves that are matched and clamped with the protrusions are formed in the corresponding positions within the horizontal guide rails arranged on the upper and lower borders on the back surface of the metal front housing 1.

[0028] When in use, as shown in FIG. 9 and FIG. 10, the lens holder 2, the lens frame 3, and the lens 4 are installed sequentially in the corresponding positions on the front side of the metal front housing, or assembled in advance. Then, the GOPRO sport camera 5 is placed in the correct position through the opening on the back surface of the metal front housing 1, and finally the metal rear cover 6 is gently inserted along the horizontal guide rails on the back surface of the metal front housing 1. When a click is heard, it indicates that the protrusions of the metal rear cover 6 are matched and clamped with the grooves in the guide rails of the metal front housing 1, and the assembly is completed.

[0029] The above embodiment is only a description of a preferred embodiment of the utility model, and do not limit the scope of the utility model. Without departing from the design spirit of the utility model, all variations and improvements made by those of ordinary skill in the art to the technical solution of the utility model should

Specification

fall within the scope of protection determined by the claims of the utility model.

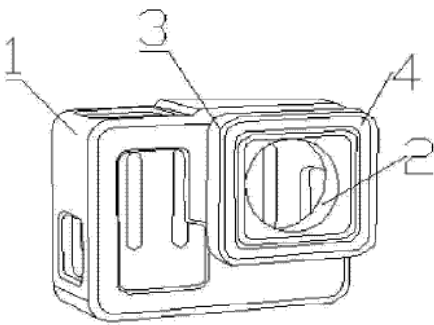


FIG. 1

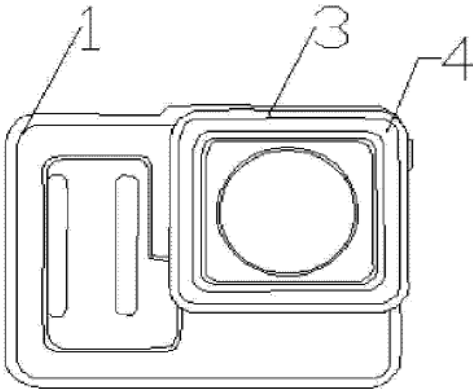


FIG. 2

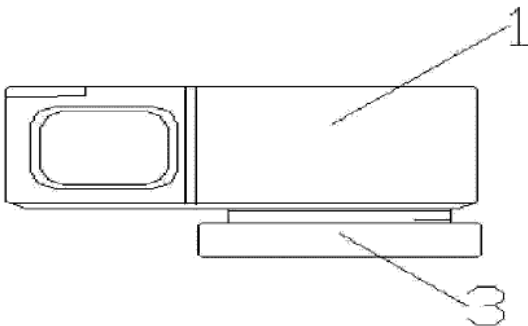


FIG. 3

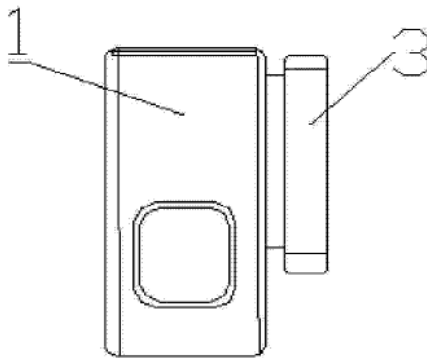


FIG. 4

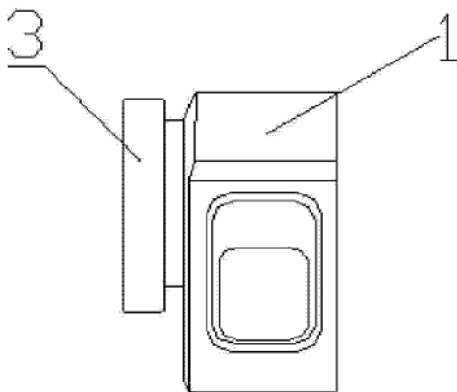


FIG. 5

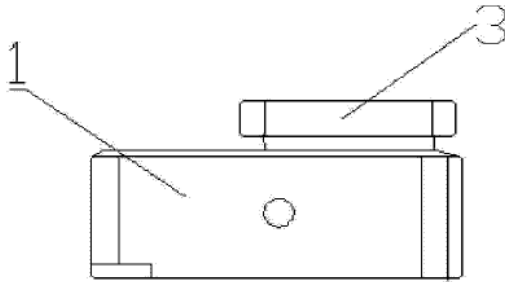


FIG. 6

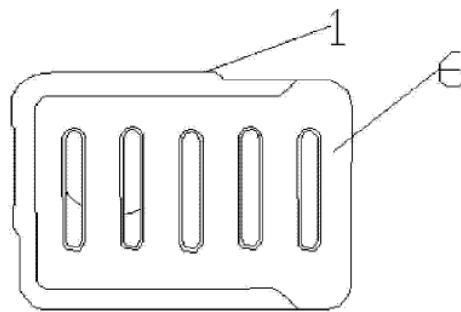


FIG. 7

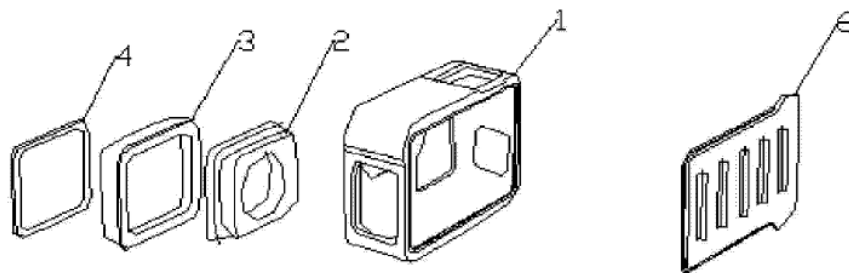


FIG. 8

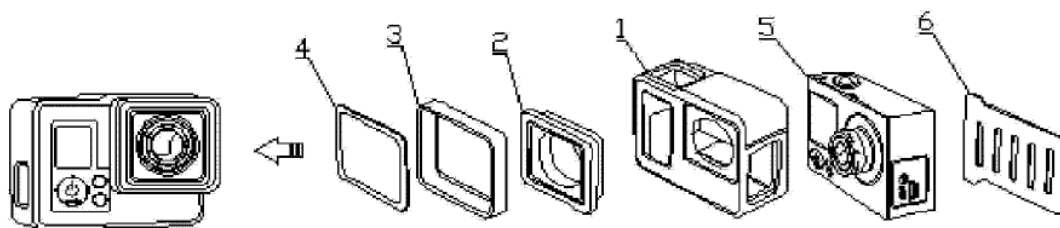


FIG. 9

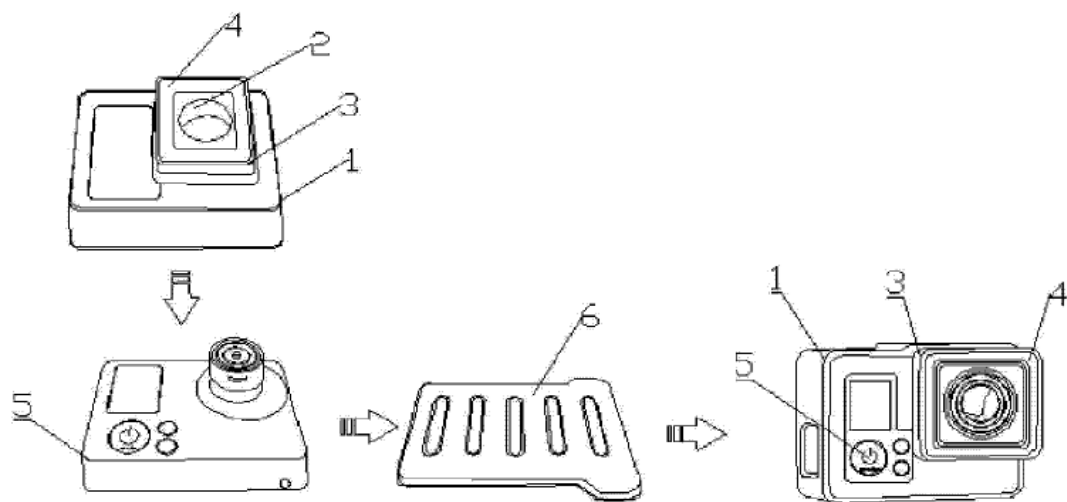


FIG. 10