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Inventor(s)	Planck; William A. et al.

WEAPON SIGHT GRIP

Abstract

A weapon sight grip and associated components and methods. The weapon sight can be a firearm sight, such as a red dot type sight. The firearm accessory includes a base configured to be connected to a weapon and a sighting portion configured to assist a user in aiming the weapon. The firearm accessory includes grip structure such as an elastomeric pad, ridge, or other structure configured to facilitate a user in gripping the sight, such as to rack a slide on which the sight is mounted.

Inventors: **Planck; William A. (Columbia, MO), Meissen; Tim (Columbia, MO), Cottrell; Michael (Ashland, MO), Ball; Shane (Columbia, MO)**

Applicant: **Crimson Trace Corporation** (Columbia, MO)

Family ID: **1000008586799**

Assignee: **Crimson Trace Corporation (Columbia, MO)**

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Background/Summary

CROSS-REFERENCE TO RELATED APPLICATION [0001] The present application is a continuation of U.S. patent application Ser. No. 18/053,302, filed Nov. 7, 2022, and claims priority to U.S. Provisional Patent App. No. 63/263,684, filed Nov. 7, 2021, the entirety of each of which are hereby incorporated by reference.

FIELD
[0002] The present disclosure generally relates to weapon accessories, and more particularly to weapon sights.
BACKGROUND
[0003] Various types of weapon sights are used to assist a shooter in aiming the weapon. Improvements are needed.
SUMMARY
[0004] In one aspect, a pistol sight is for use on a pistol having a slide. The pistol sight comprises a base and a sighting portion. The base includes mount connection structure configured for connecting the pistol sight to the pistol. The sighting portion is supported by the base. The sighting portion is configured to assist a shooter of the firearm in aiming the firearm. The sighting portion includes a post extending upward above the base. The post includes a grip comprising elastomeric material defining a gripping surface arranged to be engaged by a finger of a user to grip the pistol sight to rack the slide of the pistol.
[0005] In another aspect, a pistol sight is for use on a pistol having a slide. The pistol sight comprises a base including mount connection structure configured for connecting the pistol sight to the pistol. The pistol sight comprises a sighting portion supported by the base. The sighting portion is configured to assist a shooter of the firearm in aiming the firearm. The sighting portion includes a post extending upward above the base. The post includes a ridge extending upward along the post. The ridge is arranged to be engaged by a finger of a user to grip the pistol sight to rack the slide of the pistol.
[0006] In another aspect, a pistol sight is for use on a pistol having a slide. The pistol sight comprises a base including mount connection structure configured for connecting the pistol sight to the pistol. The base includes an upstanding ridge arranged to be engaged by a finger of a user to grip the pistol sight to rack the slide of the pistol. The pistol sight includes a sighting portion supported by the base. The sighting portion being configured to assist a shooter of the firearm in aiming the firearm.
[0007] Other objects and features of the present disclosure will be in part apparent and in part pointed out herein.

Description

BRIEF DESCRIPTION OF THE DRAWINGS
[0008] FIG. **1** is a front, left perspective of a firearm accessory of the present disclosure;
[0009] FIG. **2** is a rear, right perspective of the firearm accessory;
[0010] FIG. **3** is a right elevation of the firearm accessory;
[0011] FIG. **4** is a rear, right perspective of the firearm accessory similar to FIG. **2**, but omitting a grip pad;
[0012] FIG. **5** is a view similar to FIG. **4** but omitting an actuator cover;

[0013] FIG. **6** is a section of the firearm accessory taken in a plane including line **6**-**6** of FIG. **1**;
[0014] FIG. **7** is a photograph of the firearm accessory on a slide of a pistol and showing a hand of a user pinching the firearm accessory to rack the slide;
[0015] FIG. **8** is a front, right perspective of a second embodiment of a firearm accessory of the present disclosure;
[0016] FIG. **9** is a front, left perspective of a third embodiment of a firearm accessory of the present disclosure; and
[0017] FIG. **10** is a rear, left perspective of the firearm accessory of FIG. **9**.
[0018] Corresponding reference numbers indicate corresponding parts throughout the drawings.

DETAILED DESCRIPTION

[0019] Referring to FIG. **1**, a firearm sight of the present disclosure is indicated by **10**. In the illustrated embodiment, the firearm sight is a "red dot" type sight configured to assist a shooter in aiming a firearm (e.g., pistol) at a target. It will be appreciated that aspects of the present disclosure can be implemented on other firearm accessories (e.g., other types of firearm sights) without departing from the scope of the present disclosure. The firearm sight **10** can be referred to broadly as a firearm accessory.
[0020] In general, the firearm sight **10** includes a base **12**, an optical lens **14**, and a lens support **16**. Collectively, the lens and lens support can be referred to as a sighting portion. Moreover, the base and lens support can be referred to as a sight body, which can be formed of metal or another suitable material. In the illustrated embodiment, the base **12** is a generally rectangular structure having a forward end adjacent the lens **14** and having an opposite rear end. The base **12** is configured to be connected to a firearm, as described in further detail below. For example, the base **12** can include one or more openings through which a fastener (e.g., screw) can be passed to directly connect the base to the firearm or to connect the base to a mount that is connected to the firearm.
[0021] The lens **14** is arranged to permit a shooter to look through the lens when aiming the firearm. It will be appreciated that the firearm sight **10** includes a light source **20** housed in the rear portion of the base **12** that is configured to emit light forward toward the lens **14** to be reflected rearward to be seen by the shooter when the shooter is looking through the lens, as is common with red dot type sights. The reflected light (e.g., having the appearance of a red dot) is adjustable to locate the dot to correspond to a correct aiming point of the firearm to sight in or zero the firearm. For example, a first dial **22** (broadly, vertical adjustment actuator) can be used to change a vertical position of the dot as seen by the shooter, and a second dial **24** (broadly, horizontal adjustment actuator) can be used to change a horizontal position of the dot as seen by the shooter.
[0022] The lens support **16** extends around the lens **14** to protect the lens and to secure the lens in position with respect to the base **12**. The lens support **16** includes a first post **16**A on the right side of the lens and a second post **16**B on the left side of the lens. The lens support includes a cross member **16**C extending between upper ends of the posts **16**A, **16**B. Other configurations of lens supports can be used without departing form the scope of the present disclosure. Collectively, the lens support **16** and forward portion of the base **12** can be referred to as a shroud or frame that houses or supports the lens **14**.
[0023] The sight **10** includes actuators **26** on the opposite left and right sides of the sight to enable a user to turn the sight on/off, adjust a mode of the sight, and/or change a brightness of the light source, etc. A battery **27** (broadly, power source) is held in a battery compartment under a battery cover **28** and is operatively connected to the light source **20** for powering the light source responsive to actuation of the actuators **26**.
[0024] As shown in FIGS. **5** and **6**, the actuators **26** each include a dome switch **26**A (broadly, switch) and a cover **26**B over the dome switch. The covers **26**B can be pressed by a user to deform the dome switch **26**A to actuate the actuator **26**. Desirably, the covers **26**B are formed of elastomeric material such as a type of rubber (e.g., TPU). The covers are flexible to permit a user to

deform the dome switch by pressing the dome switch through the cover. In manufacture, the dome switches **26**A are installed in recesses in the sight body and operatively coupled to circuitry of the sight in communication with the battery **27**. The covers **26**B can be installed over the dome switches **26**A and secured in position, such as by adhesive. The left cover **26**B has a “plus” indicator thereon, and the right cover **26**B has a “minus” indicator thereon to represent that the actuators can be used to increase or decrease the brightness of the light source. The actuators **26** can be used for other functions, such as turning the sight on/off, without departing from the scope of the present disclosure.

[0025] In the illustrated embodiment, the sight **20** includes grip structure on opposite sides of the sight to facilitate a user in gripping the sight (e.g., pinching the sight) between fingers of the user. This may be useful, for example, in facilitating a user to rack a slide of a firearm on which the sight is mounted. For example, FIG. **7** shows the sight **20** mounted on a slide S and being grasped by a user to actuate or rack the slide. The slide S may be racked to chamber a round of ammunition in the barrel of the pistol or to eject a chambered round. In an aspect, besides serving as a sight, the sight also serves as a racking aide to provide increased gripping surface for a user to more easily rack the slide. The sight includes various types of grip structure.

[0026] Referring to FIGS. **1** and **2**, the sight **10** includes grip features on the left and right sides of the sight. The sight **10** includes left and right first grip features comprising grip pads **30** applied to respective outboard left and right sides of the lens shroud. The grip pads **30** can be formed of elastomeric material such as a type of rubber (e.g., TPE). The grip pads **30** include respective gripping surfaces **30**A arranged to face laterally away from the lens **14** in opposing directions with respect to each other. The arrangement is such that a user can “pinch” the sight by gripping the grip pads **30** on the opposite sides of the sight. Desirably, the material of the grip pads **30** and/or surface texture of the grip pads are configured to provide increased friction with the hand of the user.

[0027] Referring to FIGS. **4** and **5**, the right grip pad **30** will be discussed in more detail, with the understanding that the left grip **30** pad has a similar (e.g., mirror image) construction and is mounted on the sight body in a similar fashion. As shown in FIG. **5**, the sight body defines a recess **34** extending along substantially the full height of the lens shroud. The recess **34** includes a peripheral rim **36** that includes a forward ridge segment **36**A, a lower ridge segment **36**B, a rear ridge segment **36**C, and an upper ridge segment **36**D. The ridge segments bound a cavity in which the grip pad **30** and the actuator cover **26**B are received. In the illustrated embodiment, the grip pad **30** and the actuator cover **26**B are provided as separate pieces (see, e.g., FIG. **4**), but it will be appreciated that they can be integrally formed without departing from the scope of the present disclosure. The grip pad **30** is sized and shaped to correspond closely to a size and shape of a portion of the cavity next to the actuator cover **26**B. The grip pad **30** can be secured in position by adhesive or other suitable methods. Desirably, the grip pad **30** is resiliently compressible such that a user's finger pressing on the grip pad temporarily deforms the grip pad to increase friction between the user's finger and the grip pad. Although the grip pad **30** is shown as having a smooth outer gripping surface, the gripping surface can be textured (see, e.g., FIG. **8**). In other embodiments, the grip pad may be formed of or include grip tape. Moreover, the gripping surfaces may be provided in similar locations as shown but be formed by textured or roughened surfaces of the sight body rather than a pad secured to the sight body.

[0028] The sight **10** includes additional grip features on the left and right sides of the sight. For example, the rear ridge segments **36**C of the rim extending around the grip pad **30** acts as a grip enhancing feature. The rear ridge segment **36**C is upstanding and defines a forward facing shoulder arranged to oppose force of a user's hand gripping the sight and pulling it rearward to rack the pistol slide. For example, if a user's hand is slipping off the rear end of the grip pad **30**, the user's hand would engage the rear ridge segment **36**C and help prevent the user's hand from slipping off the sight **10**.

[0029] The sight **10** includes additional grip features in the form of additional ridges **40** on the left

and right sides of the base **12**. The ridge **40** is upstanding and defines a forward facing shoulder arranged to oppose force of a user's hand gripping the sight **10** and pulling it rearward to rack the pistol slide. A recess **42** is provided in the base of the sight in front of the ridge and behind the lens shroud.

[0030] It will be appreciated that the user may quickly move their hand to the sight **10** without looking to grip the sight to rack the pistol slide. The grip features of the present sight permit the user to engage the sight at various locations to facilitate manipulating the slide. One or more grip features disclosed herein can be omitted, and other types of grip features can be used, without departing from the scope of the present disclosure. Moreover, it will be appreciated that grip features disclosed herein can be provided on one or both sides of the sight.

[0031] Referring to FIG. **8**, a second embodiment of a firearm sight of the present disclosure is indicated generally by **110**. The sight is similar to the sight **10**, and similar features are indicated by like reference numbers plus **100**. For example, the sight includes grip pads **130** (only the right grip pad being shown). In this embodiment, the grip pads **130** have textured gripping surfaces **130**A to increase friction with a user's hand. The texture includes a plurality of small protrusions to give the gripping surface a texture similar to that of sand paper. As with the grip pads **30** described above, the grip pads **130** can be formed of resiliently compressible material. It will be appreciated that the gripping surfaces can have other types of textures (e.g., plurality of ribs, knurled, etc.) without departing from the scope of the present disclosure.

[0032] Referring to FIGS. **9** and **10**, a third embodiment of a firearm sight of the present disclosure is indicated generally by **210**. The sight is similar to the sight **210**, and similar features are indicated by like reference numbers plus **200**. For example, the sight includes a base **12**, a lens **14**, and a lens support **16**. In this embodiment, the grip pads are not provided, and the actuators on the sides of the lens shroud are omitted. The arrangement is such that the recesses **234** in the sides of the lens shroud are left open and are provided as grip features. In use, the user's fingers can be received in the recesses **234** to engage the ridge segments **236**C to enhance grip of the sight for manipulating the slide. The outer surfaces of the lens shroud bounded by the peripheral rim **236** are shown as smooth surfaces but can be textured (e.g., knurled, ridged, etc.), without departing from the scope of the present disclosure.

[0033] In view of the above, it will be appreciated that the grip features provide traction to the user to grip the sight to perform pistol slide manipulations. The grip features increase the purchase area on each side of the slide to increase friction between the sight/slide and the user's thumb and other fingers on opposite sides of the sight/slide.

[0034] It will be apparent that modifications and variations are possible without departing from the scope of the invention defined in the appended claims. For example, mounting structure having other configurations (e.g., lacking sockets and/or holes) can be used without departing from the scope of the present disclosure. Moreover, it will be understood that a mounting adaptor could be part of the firearm or a separate component connectable to the firearm. The dimensions and proportions described herein are by way of example without limitation unless otherwise noted. Other dimensions and proportions can be used without departing from the scope of the present disclosure.

[0035] As various changes could be made in the above constructions and methods without departing from the scope of the invention, it is intended that all matter contained in the above description and shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

Claims

1. A pistol sight for use on a pistol having a slide, the pistol sight comprising: a base including mount connection structure configured for connecting the pistol sight to the pistol; and a sighting

portion supported by the base, the sighting portion being configured to assist a shooter of the firearm in aiming the firearm, the sighting portion including a post extending upward above the base, the post including a grip comprising elastomeric material defining a gripping surface arranged to be engaged by a finger of a user to grip the pistol sight to rack the slide of the pistol.

2. A pistol sight for use on a pistol having a slide, the pistol sight comprising: a base including mount connection structure configured for connecting the pistol sight to the pistol; and a sighting portion supported by the base, the sighting portion being configured to assist a shooter of the firearm in aiming the firearm, the sighting portion including a post extending upward above the base, the post including a ridge extending upward along the post, the ridge being arranged to be engaged by a finger of a user to grip the pistol sight to rack the slide of the pistol.

3. A pistol sight for use on a pistol having a slide, the pistol sight comprising: a base including mount connection structure configured for connecting the pistol sight to the pistol, the base including an upstanding ridge arranged to be engaged by a finger of a user to grip the pistol sight to rack the slide of the pistol; and a sighting portion supported by the base, the sighting portion being configured to assist a shooter of the firearm in aiming the firearm.