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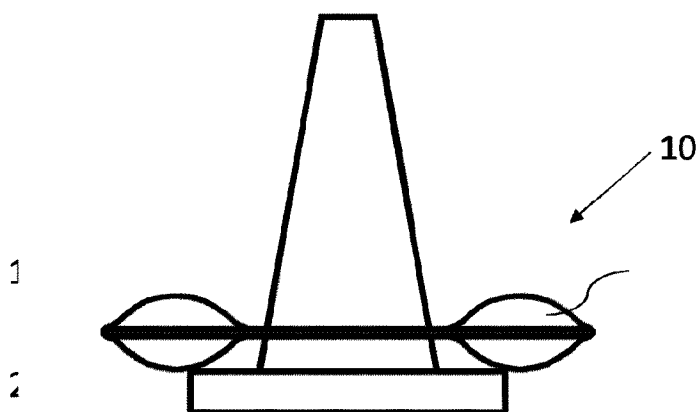
(72) Inventeurs/Inventors:
JEWELL, GLEN, CA;
GAYLORD, LORI, CA

(73) Propriétaires/Owners:
JEWELL, GLEN, CA;
GAYLORD, LORI, CA

(74) Agent: WOODRUFF, NATHAN V.

(54) Titre : ANCRAGE LESTE D'INDICATEUR TRACEUR DE SECURITE

(54) Title: WEIGHTED SAFETY DELINEATOR ANCHOR



(57) **Abrégé/Abstract:**

A weighted anchor for a safety delineator is provided. The safety delineator has a base that supports an upstanding body, the base extending outward from the upstanding body. The weighted anchor has a body having an outer perimeter that is greater than an outer perimeter of the base of the safety delineator. The body has a web with a central aperture that is sized to receive the upstanding body of the safety delineator. The body also has a first weight positioned along a first side edge of the web and a second weight positioned along a second side edge of the web that is opposite the first side edge relative to the central aperture. Each of the first and second weights have a length such that, when installed, the first and second weights extend past the outer perimeter of the base of the safety delineator.



ABSTRACT OF THE DISCLOSURE

A weighted anchor for a safety delineator is provided. The safety delineator has a base that supports an upstanding body, the base extending outward from the upstanding body. The weighted anchor has a body having an outer perimeter that is greater than an outer perimeter of the base of the safety delineator. The body has a web with a central aperture that is sized to receive the upstanding body of the safety delineator. The body also has a first weight positioned along a first side edge of the web and a second weight positioned along a second side edge of the web that is opposite the first side edge relative to the central aperture. Each of the first and second weights have a length such that, when installed, the first and second weights extend past the outer perimeter of the base of the safety delineator.

WEIGHTED SAFETY DELINEATOR ANCHOR

TECHNICAL FIELD

[0001] This relates to weighted anchors for safety delineators.

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BACKGROUND

[0002] Safety delineators are commonly used to direct traffic, such as in construction zones, or to warn passers-by of potential hazards. These safety delineators are prone to tipping or displacement due to various factors, such as wind, drafts from passing vehicles, or interactions with people or animals. To limit this, weighted anchors may be used. Examples of weighted anchors include U.S. patent no. 5,560,732 (Kulp et al.) entitled "SAFETY DELINEATORS"; U.S. patent no. 6,019,542 (Bent et al.) entitled "DROP-OVER BASE FOR TRAFFIC DELINEATION DEVICE"; and U.S. patent no. 3,451,368 (Keats et al.) entitled "CONICAL MARKER DEVICE".

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SUMMARY

[0003] According to an aspect, there is provided a weighted anchor for a safety delineator having a base that supports an upstanding body, the base extending outward from the upstanding body, the weighted anchor comprising a body having an outer perimeter that is greater than an outer perimeter of the base of the safety delineator, the body comprising a web that has a central aperture that is sized to receive the upstanding body of the safety delineator, and a first weight positioned along a first side edge of the web, and a second weight positioned along a second side edge of the web that is opposite the first side edge relative to the central aperture, each of the first and second weights having a length such that, when installed, the first and second weights extend past the outer perimeter of the base of the safety delineator.

[0004] According to another aspect, the web may be made from a flexible material.

30 [0005] According to another aspect, the web may be foldable between a use position and a storage position, wherein, in the storage position, the first and second weights may be adjacent to each other.

[0006] According to another aspect, the first and second weights may be made by folding over the web to form material-receiving chambers.

5 [0007] According to another aspect, the material-receiving chambers may be filled with sand.

[0008] According to another aspect, each of the first and second weights may overlap a portion of the base of the safety delineator.

10 [0009] According to another aspect, each of the first weight and the second weight may comprise a top surface having a handle.

[0010] According to an aspect, there is provided a combination of a safety delineator having a base that supports an upstanding body, the base extending outward from the upstanding body and a weighted anchor installed on and overlying the base of the safety delineator, the weighted anchor comprising a body having an outer perimeter that is greater than an outer perimeter of the base of the safety delineator, the body comprising a web that has a central aperture that is sized to receive the upstanding body of the safety delineator and a first weight positioned along a first side edge of the web, and a second weight positioned along a second side edge of the web that is opposite the first side edge relative to the central aperture, each of the first and second weights having a length such that the first and second weights extend past the outer perimeter of the base of the safety delineator.

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25 [0011] According to another aspect, the web may be made from a flexible material.

[0012] According to another aspect, the web may be foldable between a use position and a storage position, wherein, in the storage position, the first and second weights may be adjacent to each other.

30 [0013] According to another aspect, the first and second weights may be made by folding over the web to form material-receiving chambers.

[0014] According to another aspect, the material-receiving chambers may be filled with sand.

5 [0015] According to another aspect, each of the first and second weights may overlap a portion of the base of the safety delineator.

[0016] According to another aspect, each of the first weight and the second weight may comprise a top surface having a handle.

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[0017] In other aspects, the features described above may be combined together in any reasonable combination as will be recognized by those skilled in the art.

BRIEF DESCRIPTION OF THE DRAWINGS

15 [0018] These and other features will become more apparent from the following description in which reference is made to the appended drawings, the drawings are for the purpose of illustration only and are not intended to be in any way limiting, wherein:

FIG. 1 is a side elevation view of a safety delineator and a weighted anchor.

FIG. 2 is a perspective view of the safety delineator and weighted anchor of FIG.

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FIG. 3 is a top plan view of the safety delineator and weighted anchor of FIG. 1.

FIG. 4 is a side elevation view of a weighted anchor in a storage position.

FIG. 5 is a perspective view of the weighted anchor of FIG. 1.

25 DETAILED DESCRIPTION

[0019] A weighted anchor for a safety delineator, generally identified by reference numeral 10, will now be described with reference to FIG. 1 through 5.

30 [0020] Referring to FIG. 1, weighted anchor 10 is intended for use with a safety delineator 12 having a base 14 that supports an upstanding body 16. Base 14 extends outward from upstanding body 16. Safety delineator 12 may take a variety of forms as are known in

the art, such as traffic cones, traffic barrels, and traffic tubes. Weighted anchor 10 has a body 18 with an outer perimeter 20 that is greater than an outer perimeter 22 of base 14 of safety delineator 12, as shown in FIG. 3. Referring to FIG. 5, body 18 has a web 24 with a central aperture 26 that is sized to receive upstanding body 16 of safety delineator 12, as shown in
 5 FIG. 2. As safety delineators are typically cone-shaped, aperture 26 is also designed to be circular. However, aperture 26 may take other shapes, or may fit other shapes, so long as web 24 overlies base 14 of safety delineator 12, and surrounds upstanding body 16.

[0021] Referring to FIG. 2, a first weight 28 is positioned along a first side edge 30 of
 10 web 24 and a second weight 32 is positioned along a second side edge 34 relative to central aperture 26. Each of first and second weights 28 and 32 have a length such that, when installed, first and second weights 28 and 32 extend past outer perimeter 22 of base 14 of safety delineator 12, as shown in FIG. 3. Referring to FIG. 3, first and second weights 28 and 32 may overlap a portion of base 14 of safety delineator 12. The position of first and second
 15 weights 28 and 32 relative to base 14 may vary depending on the relative sizes.

[0022] Referring to FIG. 4, web 24 may be made from a flexible material, such as a woven textile, polymer, or other material. Preferably, web 24 is made from a weather resistant material that can withstand the various environmental conditions that will be
 20 encountered, such as UV degradation, extreme temperatures, precipitation, etc. If flexible, web 24 may be foldable between a use position as shown in FIG. 1 through FIG. 3 and a storage position as shown in FIG. 4 with first and second weights 28 and 32 adjacent to each other. This may be achieved in a variety of arrangements, for example, by folding as shown in FIG. 4, or by rolling, or by moving weights 28 and 32 next to each other and allowing web 24
 25 to fold in the middle. First and second weights 28 and 32 may be formed by folding over web 24 to form material-receiving chambers 36 and filling material-receiving chambers 36 with material such as sand. If made from a flexible material, chambers 36 may be formed by sewing, by adhesive, rivets, or other known connection techniques. It will be understood that material-receiving chambers 36 may also be filled with other weighted material, such as
 30 gravel, fluid, or solid material such as metal or molded weights. Referring to FIG. 2, each of first weight and second weight 28 and 32 may have a top surface 38 with a handle 40 to facilitate handling weighted anchor 10.

[0023] As shown in FIG. 1, weighted anchor 10 is preferably sized such that a proportion of the weight extends past outer perimeter 22 of base 14 to allow the weight to resist tipping or displacement of safety delineator 12, while still resting partially on safety delineator 12 to
5 securely hold it. While first and second weights 28 and 32 are provided on two opposite sides of base 14, the weight also overhangs the other two sides of base 14, which helps resist tipping and displacement in all directions, in addition to the additional weight that holds safety delineator 12 in place. Depending on the dimensions of weighted anchor 10 the distribution of weight in weights 28 and 32 and the dimensions of safety delineator 12, there
10 may be some directionality in the resistance to tipping applied to safety delineator 12, which may be selected based on the predicted direction of force applied to safety delineator 12.

[0024] In this patent document, the word "comprising" is used in its non-limiting sense to mean that items following the word are included, but items not specifically mentioned are not
15 excluded. A reference to an element by the indefinite article "a" does not exclude the possibility that more than one of the elements is present, unless the context clearly requires that there be one and only one of the elements.

[0025] The scope of the following claims should not be limited by the preferred
20 embodiments set forth in the examples above and in the drawings, but should be given the broadest interpretation consistent with the description as a whole.

What is Claimed is:

1. A weighted anchor for a safety delineator having a base that supports an upstanding body, the base extending outward from the upstanding body, the weighted anchor comprising:
5 a body having an outer perimeter that is greater than an outer perimeter of the base of the safety delineator, the body comprising:
a web that has a central aperture that is sized to receive the upstanding body of the safety delineator; and
a first weight positioned along a first side edge of the web, and a second
10 weight positioned along a second side edge of the web that is opposite the first side edge relative to the central aperture, each of the first and second weights having a length such that, when installed, the first and second weights extend past the outer perimeter of the base of the safety delineator.
- 15 2. The weighted anchor of claim 1, wherein the web is made from a flexible material.
3. The weighted anchor of claim 2, wherein the web is foldable between a use position and a storage position, wherein, in the storage position, the first and second weights are adjacent to each other.
- 20 4. The weighted anchor of claim 1, wherein the first and second weights are made by folding over the web to form material-receiving chambers.
5. The weighted anchor of claim 4, wherein the material-receiving chambers are filled
25 with sand.
6. The weighted anchor of claim 1, wherein each of the first and second weights overlap a portion of the base of the safety delineator.
- 30 7. The weighted anchor of claim 1, wherein each of the first weight and the second weight comprise a top surface having a handle.

8. In combination:

a safety delineator having a base that supports an upstanding body, the base extending outward from the upstanding body; and

a weighted anchor installed on and overlying the base of the safety delineator, the
5 weighted anchor comprising:

a body having an outer perimeter that is greater than an outer perimeter of the base of the safety delineator, the body comprising:

a web that has a central aperture that is sized to receive the upstanding body of the safety delineator; and

10 a first weight positioned along a first side edge of the web, and a second weight positioned along a second side edge of the web that is opposite the first side edge relative to the central aperture, each of the first and second weights having a length such that the first and second weights extend past the outer perimeter of the base of the safety delineator.

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9. The combination of claim 8, wherein the web is made from a flexible material.

10. The combination of claim 9, wherein the web is foldable between a use position and a storage position, wherein, in the storage position, the first and second weights are adjacent to
20 each other.

11. The combination of claim 8, wherein the first and second weights are made by folding over the web to form material-receiving chambers.

25 12. The combination of claim 11, wherein the material-receiving chambers are filled with sand.

13. The combination of claim 8, wherein each of the first and second weights overlap a portion of the base of the safety delineator.

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14. The combination of claim 8, wherein each of the first weight and the second weight comprise a top surface having a handle.

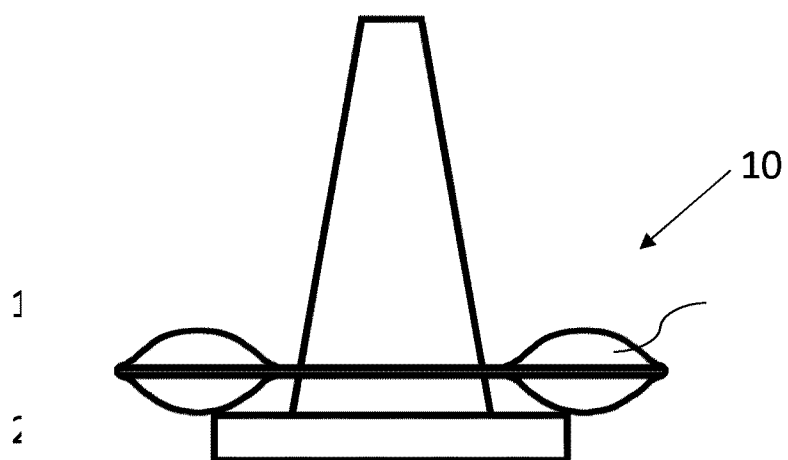


FIG. 1

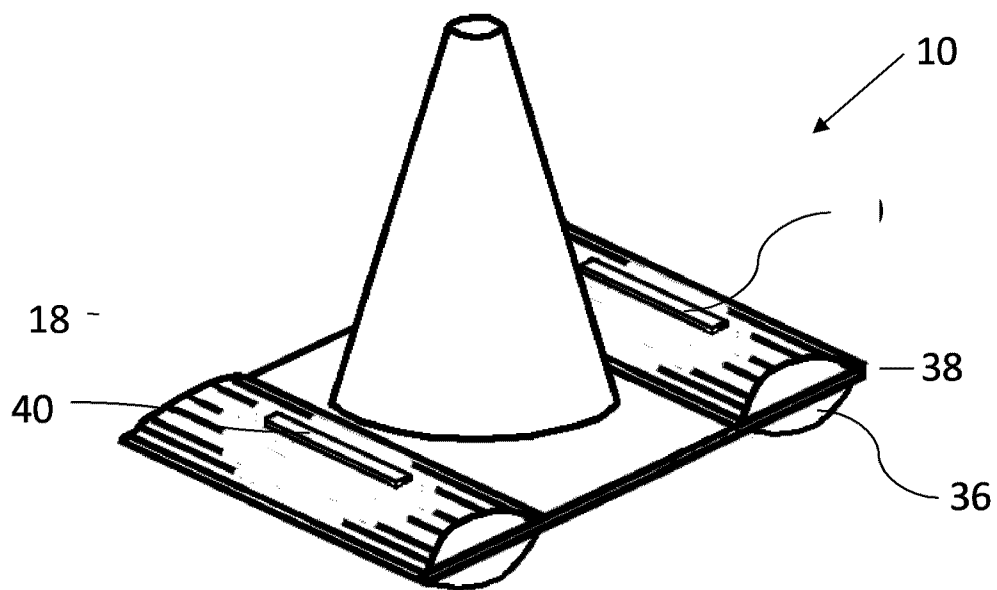


FIG. 2

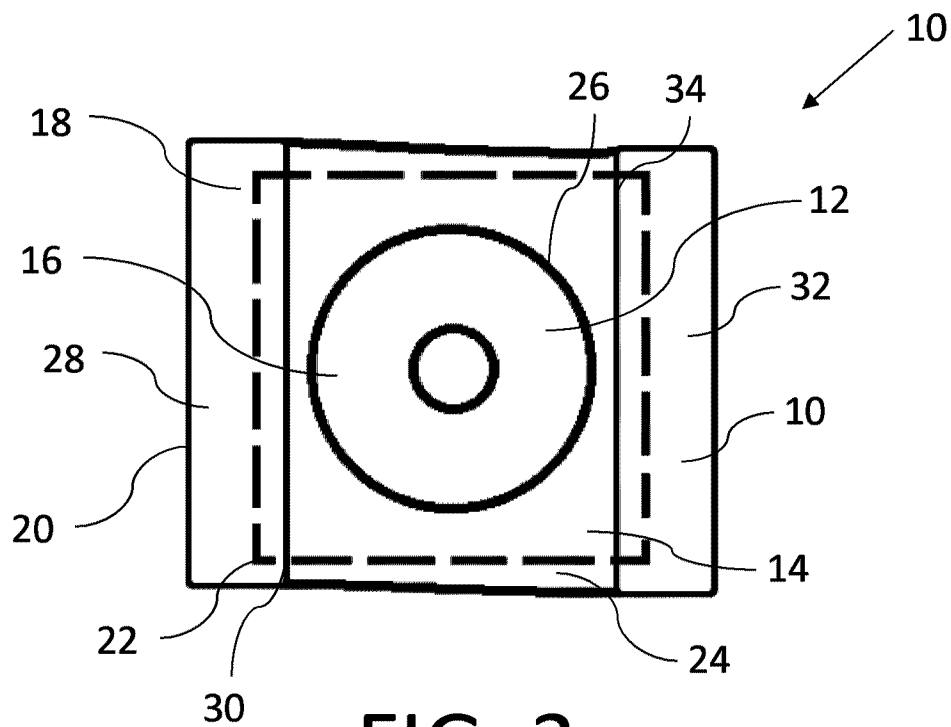


FIG. 3

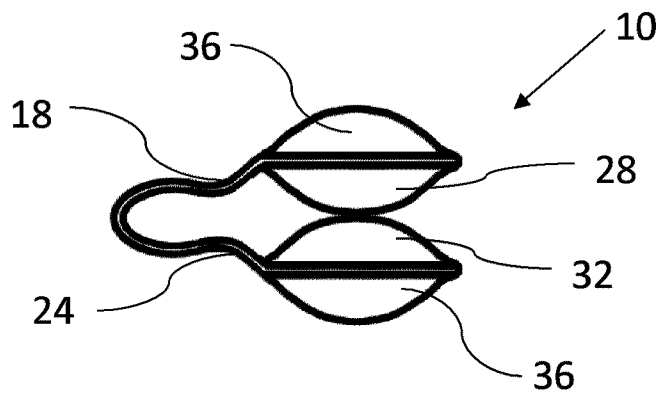


FIG. 4

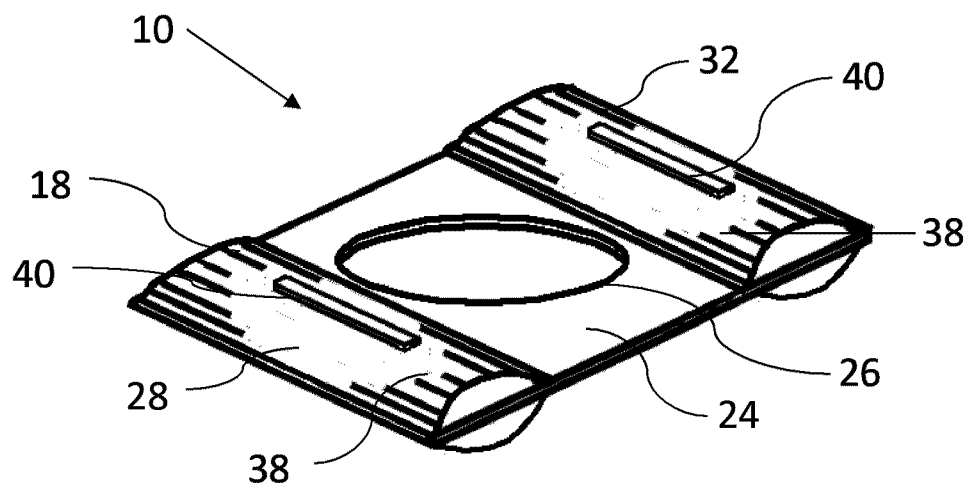
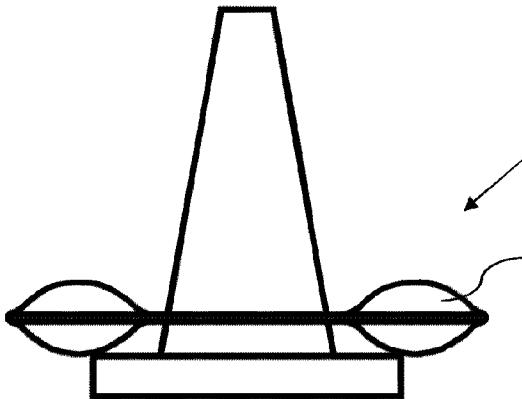


FIG. 5

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