

FIDGET ACCESSORY AND SYSTEM FOR PROVIDING THE SAME**BACKGROUND OF THE INVENTION**Technical Field

[0001] The present disclosure relates to a fidget accessory, and more particularly to a fidget accessory having a bowl-and-stone arrangement which is based on complementary geometries and magnetic interactions therebetween.

Description of the Related Art

[0002] Many fidget accessories are based on a spinner arrangement in which a base supports an outer revolving member. The user holds the base in his/her hand and spins the revolving vehicle around the base. A bearing is generally disposed between the base and revolving vehicle to facilitate the spinning action. Such a “fidget spinner” is based on the concept that such a spinner would calm people who tend to fidget, acting as a release mechanism for nervous energy, anxiety and the like.

[0003] While known fidget spinners may provide some beneficial calming effect, they represent only one approach and may not impart the same or any calming effect for all users and/or may not impart an optimal level of calming for any particular user. For example, such spinners are based on the user creating a continuous motion of the spinner, as opposed to creating motion or movement only in response to a specific user action. As such, there is an ongoing need in the art for an improved fidget accessory that can provide beneficial calming or stress-reducing effects for users based on alternative approaches, including those that do not depend on continuous motion.

SUMMARY OF THE INVENTION

[0004] The present disclosure relates to a fidget accessory which includes a plurality of stones. Each of the stones includes a stone lid, a stone body, and at least one stone magnet disposed inside the stone body of each of the plurality of stones. The fidget accessory further includes a bowl having a bowl base disposed at a bottom of the bowl on which the plurality of stones are configured to be arranged in a base orientation. The bowl includes a bowl lip circumferentially surrounding a top edge of the bowl, and a bowl ramp extending between the bowl lip and the bowl base. The bowl further includes one or more bowl magnets contained in the bowl base with a polarity opposite to corresponding ones of the stone magnets at least when the plurality of stones are arranged in the base orientation, wherein the one or more bowl magnets are configured to magnetically interact with the stone magnets.

[0005] The present disclosure further relates to a fidget accessory which includes first and second stones, and a bowl. Each of the first and second stones include a stone lid, a stone body, and first and second stone magnets are disposed inside the first and second stones respectively. The bowl includes a bowl base disposed at a bottom of the bowl, and on which the first and second stones are configured to be arranged side by side adjacent to each other in a base orientation. The bowl includes a bowl magnet contained in the bowl base and has a polarity opposite to that of the first and second stone magnets, wherein the bowl magnet is configured to magnetically interact with the first and second stone magnets. The bowl, and the first and second stones have complimentary geometries and magnetic interactions therebetween, which cause the first stone to dislodge from the base orientation and move towards the second stone upon application of an external user force to the first stone in an upward direction, and which further causes each of the first and

second stones to remain magnetically engaged with one of the bowl and corresponding other stone upon application of the external user force.

[0006] These as well as other aspects, advantages, and alternatives will become apparent to those of ordinary skill in the art by reading the following detailed description with reference where appropriate to the accompanying drawings. Further, it should be understood that the description provided in this summary section and elsewhere in this document is intended to illustrate the claimed subject matter by way of example and not by way of limitation.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] The illustrated embodiments of the subject matter will be best understood by reference to the drawings, wherein like parts are designated by like numerals throughout. The following description is intended only by way of example, and simply illustrates certain selected embodiments of devices, systems, and processes that are consistent with the subject matter as claimed herein:

[0008] **FIG. 1** illustrates a perspective view of a fidget accessory, in accordance with an embodiment of the present disclosure;

[0009] **FIG. 2** illustrates an exploded view of the fidget accessory of **FIG. 1**, together with a further leash portion, in accordance with an embodiment of the present disclosure;

[0010] **FIGs. 3A-3C** illustrate side and end views of a bowl of the fidget accessory of **FIG. 1**, in accordance with an embodiment of the present disclosure;

[0011] **FIGs. 4A-4B** illustrate perspective and side views, respectively, of a stone of the fidget accessory of **FIG. 1**, in accordance with an embodiment of the present disclosure;

[0012] **FIG. 5** illustrates a sectional view of a stone of the fidget accessory of **FIG. 1**, in accordance with an embodiment of the present disclosure;

[0013] **FIG. 6** illustrates a sectional view of a bowl of the fidget accessory of **FIG. 1**, in accordance with an embodiment of the present disclosure;

[0014] **FIGs. 7A-7h** illustrate various possible orientations of the stones and bowl of the fidget accessory of **FIG. 1**, in accordance with an embodiment of the present disclosure; and

[0015] **FIGs. 8A-8H** illustrate various sectional views of the stones and bowl of the fidget accessory of **FIG. 1** in the various possible orientations of **FIGs. 7A-7H**, in accordance with an embodiment of the present disclosure.

[0016] Skilled artisans will appreciate that elements in the figures are illustrated for simplicity and clarity and have not necessarily been drawn to scale. For example, the dimensions and/or relative positioning of some of the elements in the figures may be exaggerated relative to other elements to help to improve understanding of various embodiments of the present invention. Also, common but well-understood elements that are useful or necessary in a commercially feasible embodiment are often not depicted in order to facilitate a less obstructed view of these various embodiments. It will further be appreciated that certain actions and/or steps may be described or depicted in a particular order of occurrence while those skilled in the art will understand that such specificity with respect to sequence is not actually required. It will also be understood that the terms and expressions used herein have the ordinary technical meaning as is accorded to such terms and expressions by persons skilled in the technical field as set forth above except where different specific meanings have otherwise been set forth herein.

DETAILED DESCRIPTION OF THE EMBODIMENTS

[0017] The present disclosure generally relates to a fidget accessory that includes a plurality of stones configured to geometrically cooperate with a bowl. The bowl includes a bowl base on which the plurality of stones are configured to be arranged in a base orientation. The bowl includes a bowl lip circumferentially surrounding a top edge of the bowl, and a bowl ramp extending between the bowl lip and the bowl base. One or more magnets in the bowl base have a polarity opposite to corresponding magnets in the plurality of stones such that the plurality of stone are magnetically engaged with the bowl. In one or more embodiments, the fidget accessory is configured to allow a user to engage in fidget-based manual manipulation of the positions of the stones relative to the bowl and to each other thereby imparting a calming and stress-reducing effect on the user.

[0018] Referring now to the drawings, **FIG. 1** illustrates a fidget accessory **10**, in accordance with an embodiment of the present disclosure. The fidget accessory **10** includes first and second stones **11a** and **11b** magnetically engaged with a bowl **12**, where the bowl **12** is optionally engaged with a leash portion **13** magnetically or otherwise. The first and second stones **11a** and **11b** may be arranged adjacent to each other, as shown in **FIG. 1**, such that they magnetically engage with the bowl **12** by virtue of one or more magnets disposed within the first and second stones **11a** and **11b**, and one or more opposite pole magnets disposed within a base of the bowl **12**. Although, two stones are shown herein, it would be apparent to one of ordinary skill in the art, that the fidget accessory **10** may include less than or more than two stones arranged within the bowl **12**.

[0019] **FIG. 2** illustrates an exploded view of the fidget accessory **10** of **FIG. 1**, configured with a different embodiment of the leash portion **13** in accordance with the present disclosure. As with **FIG. 1**, each of the first and second stones **11a** and **11b** include a stone lid defining one side of the stone, a stone body, and a stone magnet disposed within

the stone body. For example, the first stone **11a** includes a stone lid **11c**, a stone body **11d** and a stone magnet (not shown) arranged within the stone body **11d**.

[0020] Continuing to refer to **FIG. 2**, the bowl **12** is configured with a bowl lip **12a**, a bowl ramp **12b**, a bowl channel **12c** and one or more bowl magnets (not shown) disposed within a base of the bowl **12d**. The bowl **12** is circumferentially surrounded by a bowl channel **12c**, as shown in **FIG. 2**. Moreover, the bowl lip **12a** is formed as an inwardly protruding perimeter disposed around a top edge of the bowl ramp **12b**. The bowl ramp **12b** is defined by a curved region connecting the bowl lip **12a** and bowl base **12d**. The bowl ramp **12b** has a ramp profile that is convex shaped so as to cooperate with the stone bodies (e.g., body **11d**) of the first and second stones **11a** and **11b**. The innovative shape of the bowl ramp **12b** is configured to cooperatively accommodate one or more stones (here, the first and second stones **11a** and **11b**) by having a ramp profile that facilitates movement of the stones therealong, as shown in more detail in **FIGs. 4A-4B**, for example. This cooperative arrangement is based, not only on the complementary shapes of the bowl ramp **12b** and stone bodies (e.g., body **11d**), but also on magnetic interactions. As described above and below, these magnetic interactions are provided by one or more magnets disposed within the first and second stones **11a** and **11b**, with one or more opposite pole magnets disposed within the bowl base **12d**. This combination of complimentary geometries and magnetic interactions between the bowl ramp **12b** and the one or more stones (e.g., stones **11a** and **11b**) provides a fidget-based mechanism by which the user may be able to reduce nervous energy, anxiety or psychological stress.

[0021] Referring back to **FIG. 2**, the leash **13** includes a leash collar **13a**, a leash wrap **13b**, a leash hole **13c**, a leash tail **13d**, a magnetic cap **13e**, and leash magnet (not shown). In accordance with an embodiment of the present disclosure, the bowl channel **12c** is configured to cooperatively accept the leash collar **13a** of the leash wrap **13b**. It should

be appreciated that the leash collar **13a** may be configured to form a snap-fit with the bowl channel **12c**, thereby securing the leash **13** to the bowl **12** in a fixed, but temporary or reversible manner. In this manner, different embodiments of leash **13** can be connected to and disconnected from the bowl **12**.

[0022] Referring now to **FIGs. 3A-3C**, illustrated are end and side views of the bowl **12** in accordance with the present disclosure. As shown, channel **12c** is disposed along an exterior side of the bowl **12**, forming a circumferential indentation around the bowl **12**.

[0023] **FIGs. 4A-4B** illustrate one embodiment of the first stone **11a** in accordance with the present disclosure. As shown in **FIGs. 4A-4B**, the lid **11c** may comprise a concave shape which complements a curvature of the stone body **11d** such that the stones of the present disclosure may be stacked vertically in an engaging manner, as shown and described in more detail below.

[0024] Referring now to **FIG. 5**, illustrated is a cross-sectional view of the first stone **11a** in which a stone magnet **20a** is disposed inside the stone body **11d**. In one or more embodiments, the complementary geometries between the stone lid **11c** and stone body **11d**, in combination with a stone magnet **20a** being disposed within the stone body as shown in **FIG. 5**, provides a configuration in which multiple stones may be stacked (e.g., placed one on top of each other) in an engaging manner.

[0025] **FIG. 6** is a cross-sectional view of bowl **12** illustrating first and second bowl magnets **24a** and **24b** disposed side by side inside the bowl base **12d**. In one or more embodiments of the present disclosure, the first bowl magnet **24a** may be configured to interact primarily with the opposite pole stone magnet **20a** of the first stone **11a** (see e.g., **FIG. 5**), while the second bowl magnet **24b** may be configured to magnetically interact with an opposite pole stone magnet (not shown) of the second stone **11b**, such that the first

and second stones **11a** and **11b** remain magnetically engaged with the bowl **12**. It should be appreciated that the directions of the stone magnets and the corresponding first and second bowl magnets **24a** and **24b** are configured in such a manner that the first and second stones **11a** and **11b** remain magnetically engaged with the bowl base **12d** until an external force is applied to the first and/or second stones **11a** and **11b** in a sufficient magnitude to overcome the magnetic attraction between the stones **11a** and/or **11b** and the bowl **12**, thereby dislodging the stones **11a** and **11b** from the bowl base **12d**. The complementary geometries of the stones **11a** and/or **11b** and bowl **12**, together with the aforementioned magnetic interaction therebetween, provide an arrangement in which, as the stones **11a** and/or **11b** are dislodged from the bowl base **12d** by said external force, the stones are made to travel up along the bowl ramp **12b** or over or under each other, as further illustrated below.

[0026] **FIGs. 7A-7H** illustrate various orientations of the first and second stones **11a** and **11b**, in relation to the bowl **12** of the fidget accessory **10** that may occur in response to a user applying an exemplary force, for example, such as may occur while the user is fidgeting with the accessory **10**. It should of course be appreciated that a user may engage in fidget-based manipulation of the stones by applying a wide range of forces to one or both of the stones **11a** and **11b**, and that such forces may be in any direction and have a range of magnitudes depending on the desired effect. Similarly, **FIGs. 8A-8H** depict cross sections of the first and second stones **11a** and **11b** and bowl **12** in the various orientations shown in **FIGs. 7A-7H**.

[0027] Referring first to **FIG. 7A/8A**, the first and second stones **11a** and **11b** are shown in a “base” orientation whereby the bowl magnets **24a** and **24b** and the corresponding stone magnets **20a** and **20b** are in their closest and most collinear orientation, and therefore

experience a maximum magnetic attraction to securing the first and second stones **11a** and **11b** to a base of the bowl **12**.

[0028] FIGs. 7B/8B illustrate the arrangement of FIGs. 7A/8A after an external user force **30** is applied to stone **11b**, thereby causing the stone **11b** to dislodge from its “base” orientation and to move towards stone **11a**, as a function of the direction and magnitude of user force **30**. In this fashion, user force **30** overcomes magnetic forces to separate the stone magnet **20b** from the corresponding bowl magnet **24b** such that they are no longer in their closest and most collinear orientation. As a result, the user experiences a reduced magnetic resistance when force **30** is continued to be applied.

[0029] Referring now to FIGs. 7C/8C, illustrated is a further arrangement in which external user force **30** is continued to be applied to stone **11b**, thereby causing stone **11b** to completely separate from the bowl and to move onto the adjacent stone **11a**. As such, the magnetic attraction between stone magnet **20b** from the corresponding bowl magnet **24b** greatly reduces, which is experienced by the user in the continued application of force **30**. At the same time, however, magnet **20b** of stone **11b** now experiences an attraction to the corresponding magnet **20a** of stone **11a** as a result of magnets **20a** and **20b** being moved closer to each other. Thus, not only does the user experience a greatly reduced magnetic resistance to force **30**, but now in fact begins to experience the increasing attractive force between magnets **20a** and **20b**.

[0030] FIGs. 7D/8D illustrate the orientation in which external user force **30**, together with the increasing magnetic attraction between magnets **20a** and **20b**, has caused stone **11b** to completely slide to the other side of the bowl, thereby causing stone **11b** to completely stack on adjacent stone **11a**. Given the increasing magnetic attraction between magnets **20a** and **20b** as stone **11b** moves on top of stone **11a**, together with the

complementary shape of the stones' bodies and lid as described above in **FIGs. 4A-4B**, the user may experience the application of force **30** as 'flipping' one stone on top of the other, or even 'snapping' into place in a stacked manner. The fidgeting experience may be particularly calming or stress-reducing in that, despite the user pushing the stone out of its base orientation, the user will not experience the feeling that the stone is ever at risk of falling or completely dislodging since, as one magnetic force decreases (i.e., between magnets **20b** and **24b**), another magnetic force is increasing (i.e., between magnets **20a** and **20b**).

[0031] **FIGs. 7E/8E** illustrate the same starting base orientation as **FIGs. 7A/8A** above. However, in contrast to force **30** of **FIGs. 7B/8B**, the user force **40** of **FIGs. 7F/8F** has a direction and magnitude that causes stone **11b** to dislodge from its "base" orientation and to move under adjacent stone **11a**. The further effect is to cause stone **11a** to dislodge from its base orientation as well. As with the embodiment of **FIGs. 7B/8B**, the user force **40** of **FIGs. 7F/8F** overcomes the magnetic forces to separate the stone magnet **20b** from the corresponding bowl magnet **24b** such that they are no longer in their closest and most collinear orientation, but also overcomes the additional magnetic forces to separate the stone magnet **20a** from its corresponding bowl magnet **24a** such that they are also no longer in their closest and most collinear orientation. As a result, the user experiences a reduced magnetic resistance as force **40** is continued to be applied.

[0032] **FIGs. 7G/8G** illustrate the effect of the continued application of user force **40**, in particular of causing stone **11b** to further move away from magnet **24b**, while at the same time lifting stone **11a** away from its corresponding magnet **24a**. As such, the magnetic attraction between stone magnet **20b** from the corresponding bowl magnet **24b** is greatly reduced, which is experienced by the user in the continued application of force **40**. At the same time, however, magnet **20b** of stone **11b** now experiences an attraction to, not only

the corresponding magnet **20a** of stone **11a** as a result of magnets **20a** and **20b** being moved closer to each other, but also to bowl magnet **24a**. Thus, not only does the user experience a greatly magnetic resistance to force **40**, but now in fact begins to experience the increasing attractive force as stone **11b** slides across the bowl.

[0033] Finally, **FIGs. 7H/8H** illustrate the orientation in which external user force **40**, together with the increasing magnetic attraction between magnets **20a** and **20b** and between magnet **20b** and bowl magnet **24a**, has caused stone **11b** to slide completely under stone **11a**, such that stones **11a** and **11b** are again stacked, albeit in a reversed order than in **FIG. 7D/8D**. As described above, the user may experience the application of force **40** as ‘snapping’ the stones together in a similar manner as above whereby the user does not feel as if the stones are at risk of falling by the application of force **40** due to the magnetic forces.

[0034] It should be appreciated that the user manipulation of the stones **11a** and **11b** described above with respect to **FIGs. 7A-7H/8A-8H** are exemplary only and that there are a wide range of fidget-based manipulations of the stones that may equally provide calming and beneficial effects to the user, and which are particularly made possible by the fidget accessory disclosed herein.

[0035] While the invention has been described with respect to a limited number of embodiments, it will be appreciated that many variations, modifications and other applications of the invention may be made. Therefore, the invention is not limited to the embodiments described herein.

CLAIMS

What is claimed is:

1. A fidget accessory comprising:
 - a plurality of stones, wherein each stone comprises:
 - a stone lid;
 - a stone body; and
 - at least one stone magnet disposed inside the stone body of a respective one of the plurality of stones;
 - a bowl that comprises:
 - a bowl base disposed at a bottom of the bowl, and on which the plurality of stones are configured to be arranged in a base orientation;
 - a bowl lip circumferentially surrounding a top edge of the bowl;
 - a bowl ramp extending between the bowl lip and the bowl base; and
 - one or more bowl magnets contained in the bowl base having a polarity opposite to corresponding ones of the stone magnets at least when the plurality of stones are arranged in the base orientation,
 - wherein the one or more bowl magnets are configured to magnetically interact with said stone magnets.
2. The fidget accessory of claim 1, wherein the bowl comprises a channel circumferentially surrounding the bowl.
3. The fidget accessory of claim 2, further comprising a leash portion, wherein the leash portion comprises a leash collar disposed on an inside surface of a leash wrap, and wherein the leash collar is configured to engage with the channel circumferentially surrounding the bowl.
4. The fidget accessory of claim 3, wherein the leash collar is configured to engage with the channel by way of a snap-fit.
5. The fidget accessory of claim 1, wherein the stone lid of each of the plurality of stones comprises a concave shape and the stone body of each of the plurality of stones comprises a convex curvature.

6. The fidget accessory of claim 5, wherein the concave shape of the stone lids is complementary to the convex curvature of the stone bodies.
7. The fidget accessory of claim 1, wherein the bowl lip is formed as an inwardly protruding perimeter disposed around a top edge of the bowl ramp.
8. The fidget accessory of claim 1, wherein the bowl ramp is defined by a curved region extending between the bowl lip and the bowl base.
9. The fidget accessory of claim 8, wherein the curved region of the bowl ramp comprises a convex profile that is configured to cooperate with a shape of the stone to facilitate movement of the plurality of stones along the bowl ramp.
10. The fidget accessory of claim 1, wherein the plurality of stones includes a first stone and a second stone disposed side by side adjacent to each other in the bowl.
11. A fidget accessory comprising:
 - first and second stones, wherein each of the first and second stones comprises a stone lid, a stone body, and first and second stone magnets disposed inside the first and second stones respectively; and
 - a bowl that comprises a bowl base disposed at a bottom of the bowl, and on which the first and second stones are configured to be arranged side by side adjacent to each other in a base orientation,
 - wherein the bowl comprises a bowl magnet contained in the bowl base and has a polarity opposite to that of the first and second stone magnets, wherein the bowl magnet is configured to magnetically interact with the first and second stone magnets,
 - wherein the bowl, and the first and second stones have complimentary geometries and magnetic interactions therebetween, which cause the first stone to dislodge from the base orientation and move towards the second stone upon application of an external user force to the first stone in an upward direction, and which further causes each of the first and second stones to remain magnetically engaged with one of the bowl and corresponding other stone upon application of the external user force.
12. The fidget accessory of claim 11 further comprising a leash portion, wherein the leash portion comprises a leash collar disposed on an inner surface of a leash wrap, and

wherein the leash collar is configured to engage with the channel circumferentially surrounding the bowl by way of a snap-fit arrangement.

13. The fidget accessory of claim 11, wherein each stone lid comprises a concave shape and the stone body of each stone comprises a convex curvature.

14. The fidget accessory of claim 11, wherein the bowl lip is formed as an inwardly protruding perimeter disposed around a top edge of the bowl ramp.

15. The fidget accessory of claim 11, wherein the bowl ramp is defined by a curved region extending between the bowl lip and the bowl base.