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6. The module of claim 5, wherein the power and management slot accepts a power and management c

another module.

(54) **FIGURE EXPRESSION USING A MULTI-AXIS CONTROL**

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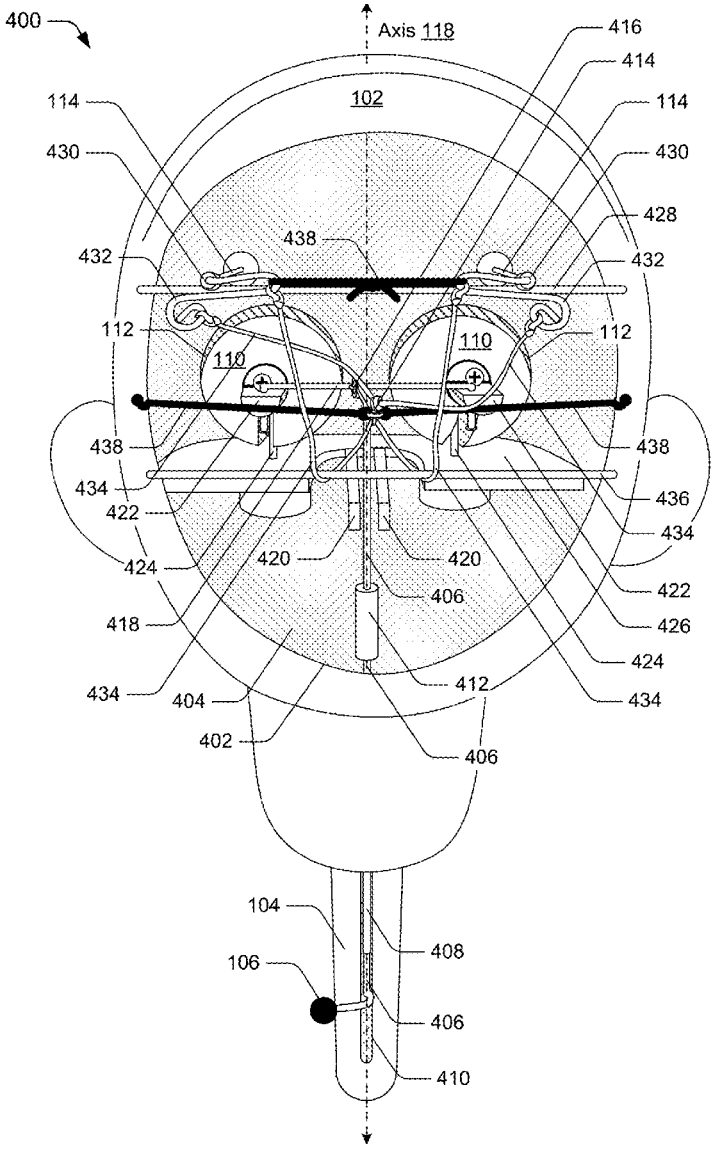
(57) **ABSTRACT**

Figure expression using a multi-axis control is described. In one or more implementations, a figure (e.g., a ventriloquism figure) includes a head having eyeballs, eyelids, and eyebrows. A multi-axis control is integral with the head and is configured to control the eyeballs, the eyelids, and the eyebrows responsive to manipulation of the multi-axis control by a hand of a person. In contrast to conventional approaches, the eyeballs, the eyelids, and the eyebrows of the figure are controlled only by the multi-axis control. Indeed, the multi-axis control is configured to control the eyeballs, the eyelids, and the eyebrows without application of force by a hand to any other control of the figure.



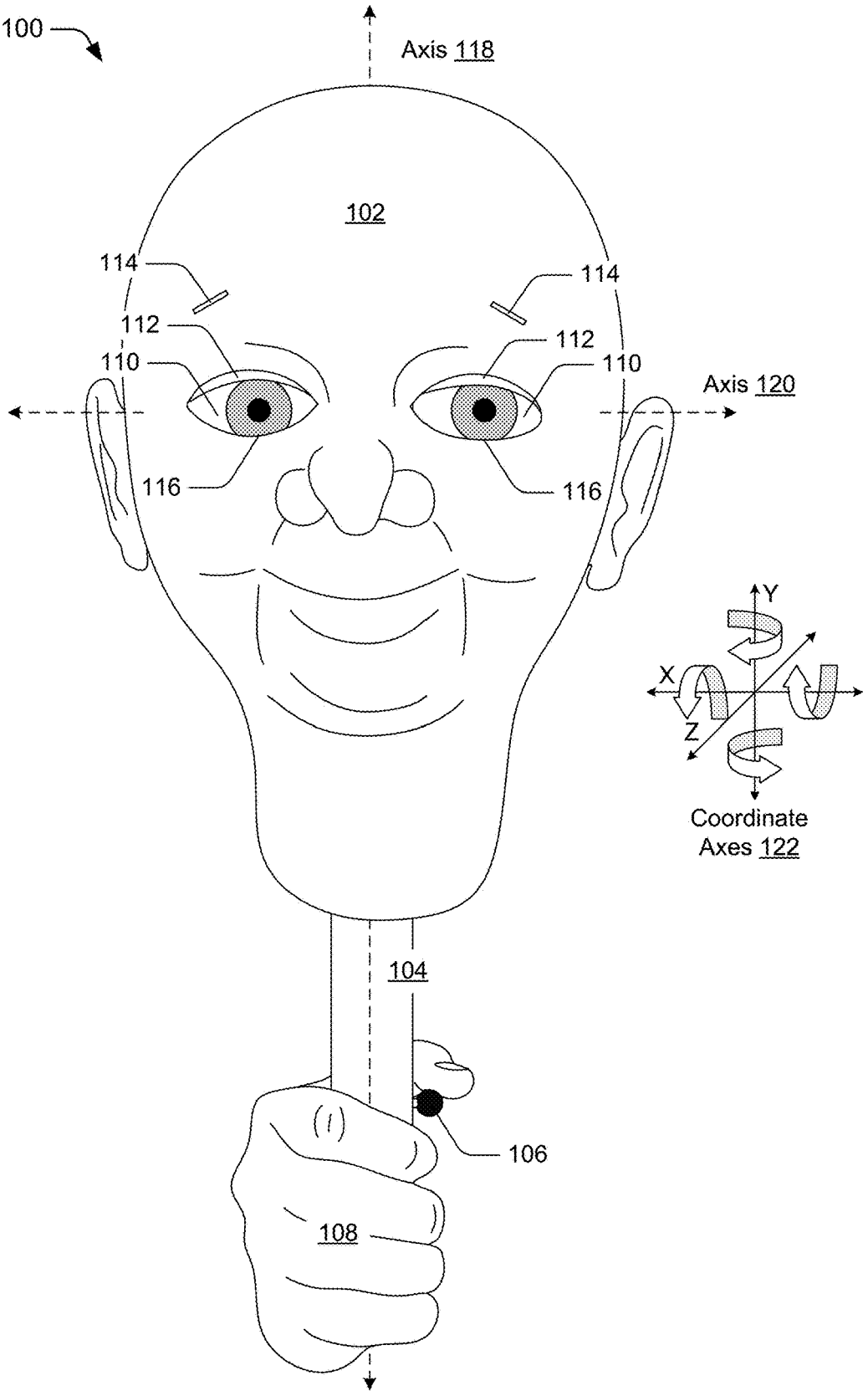

100
Axis 118
102
114
114
112
112
110
110
Axis 120
116
116
Y
X
Z
Coordinate Axes 122
104
106
108

Fig. 1

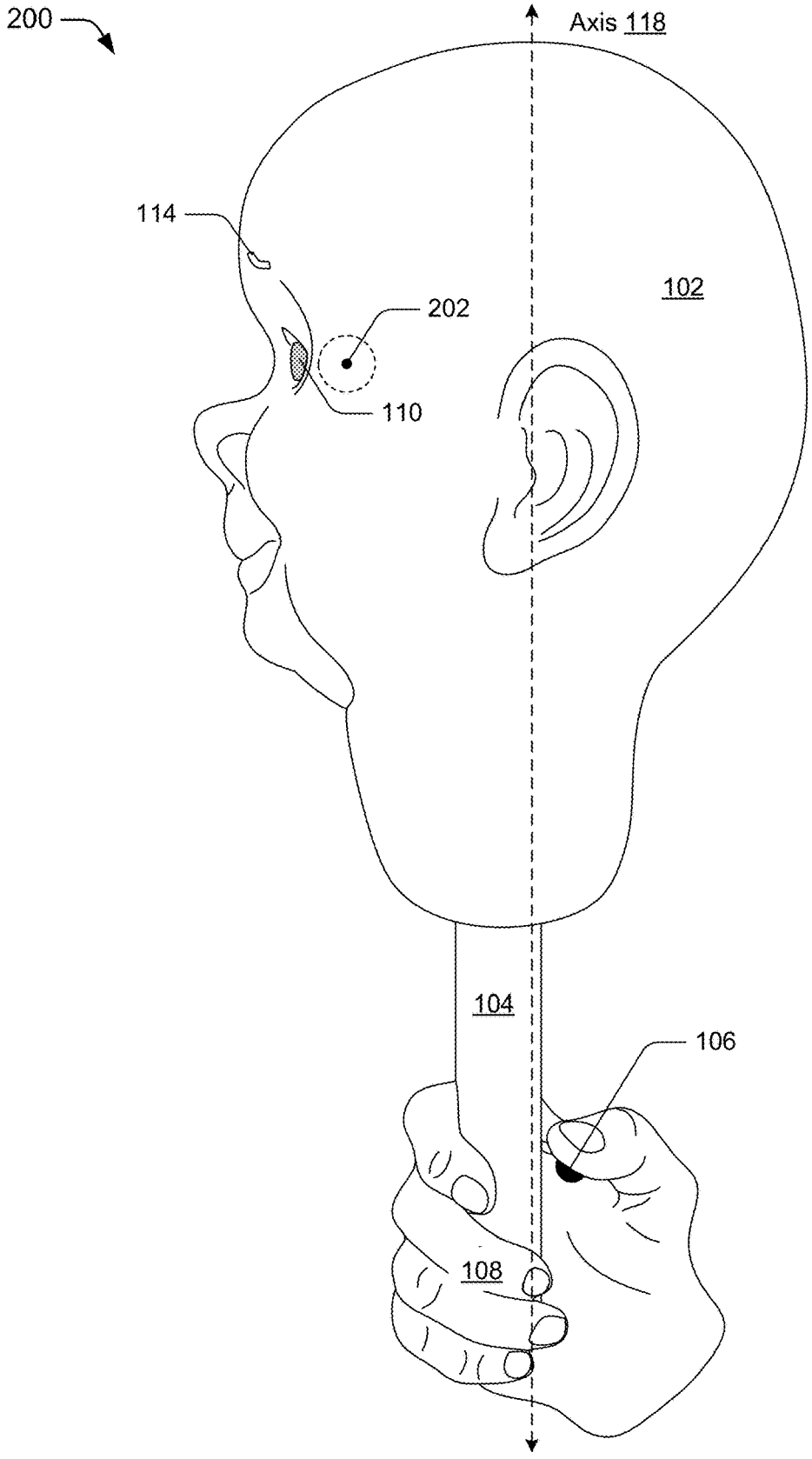


Fig. 2

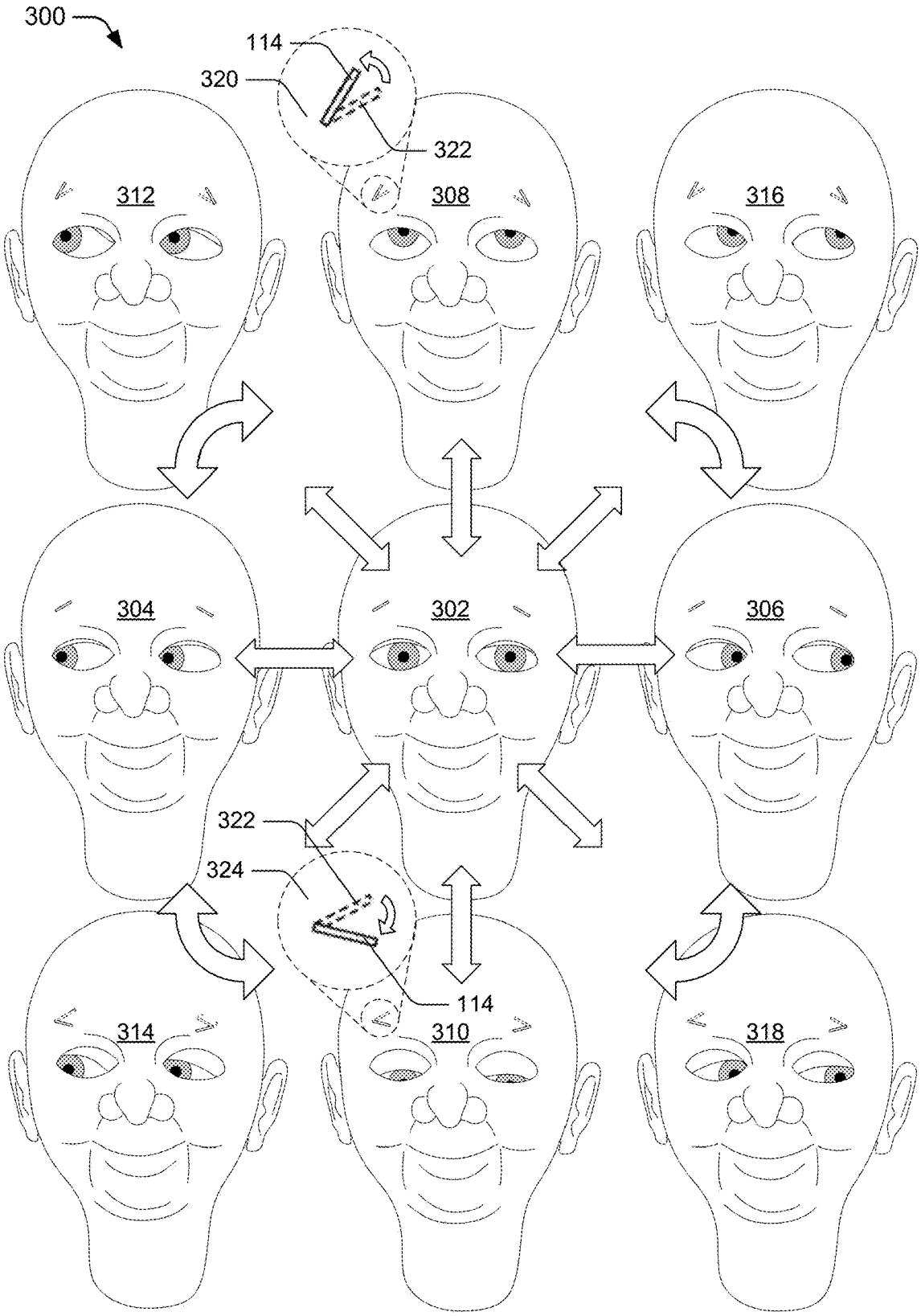


Fig. 3

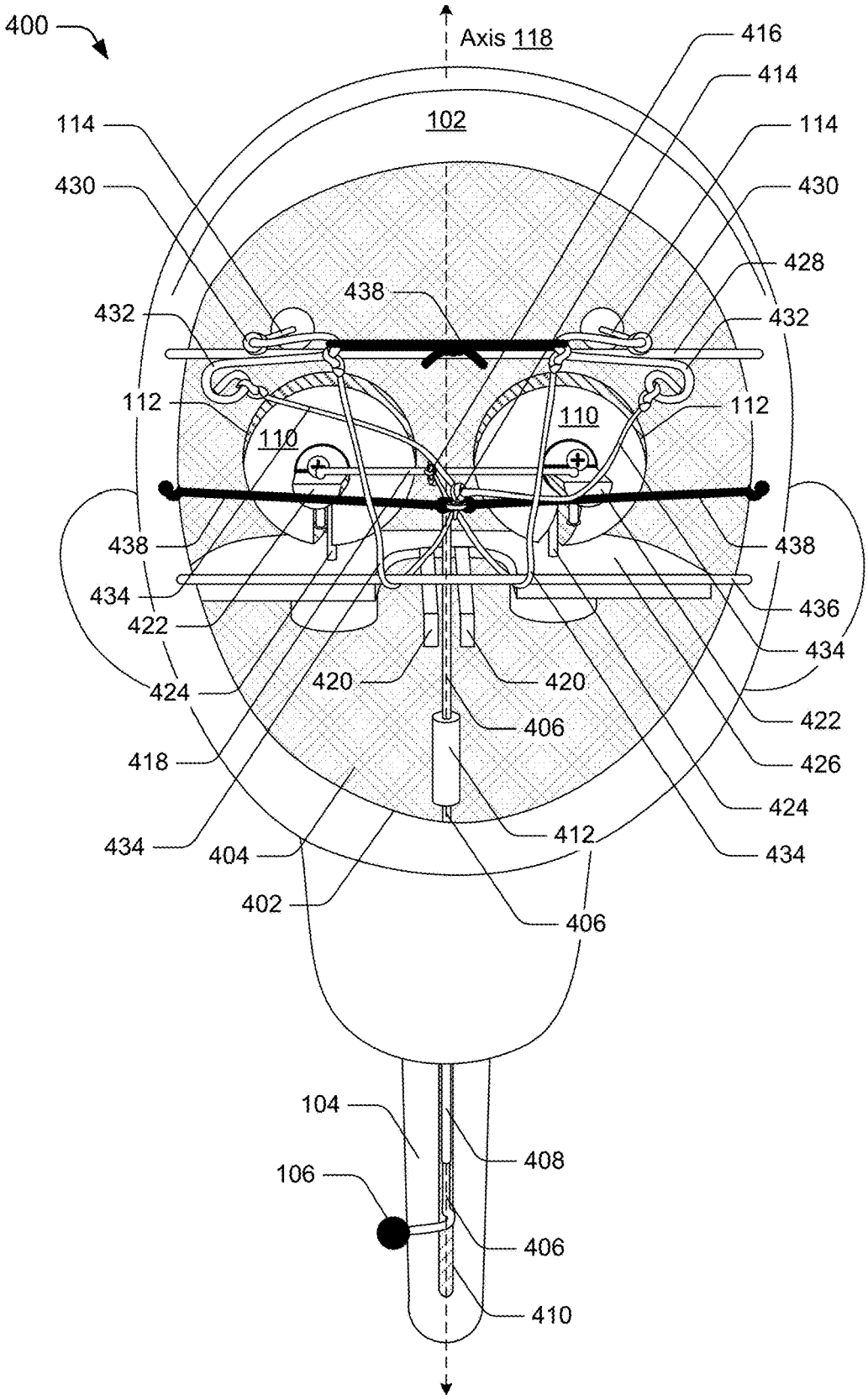

400
Axis 118
416
414
114
102
114
430
430
428
438
432
432
112
110
110
112
438
438
434
436
422
434
424
420
420
406
422
418
426
424
412
434
434
404
402
406
104
408
106
406
410

Fig. 4

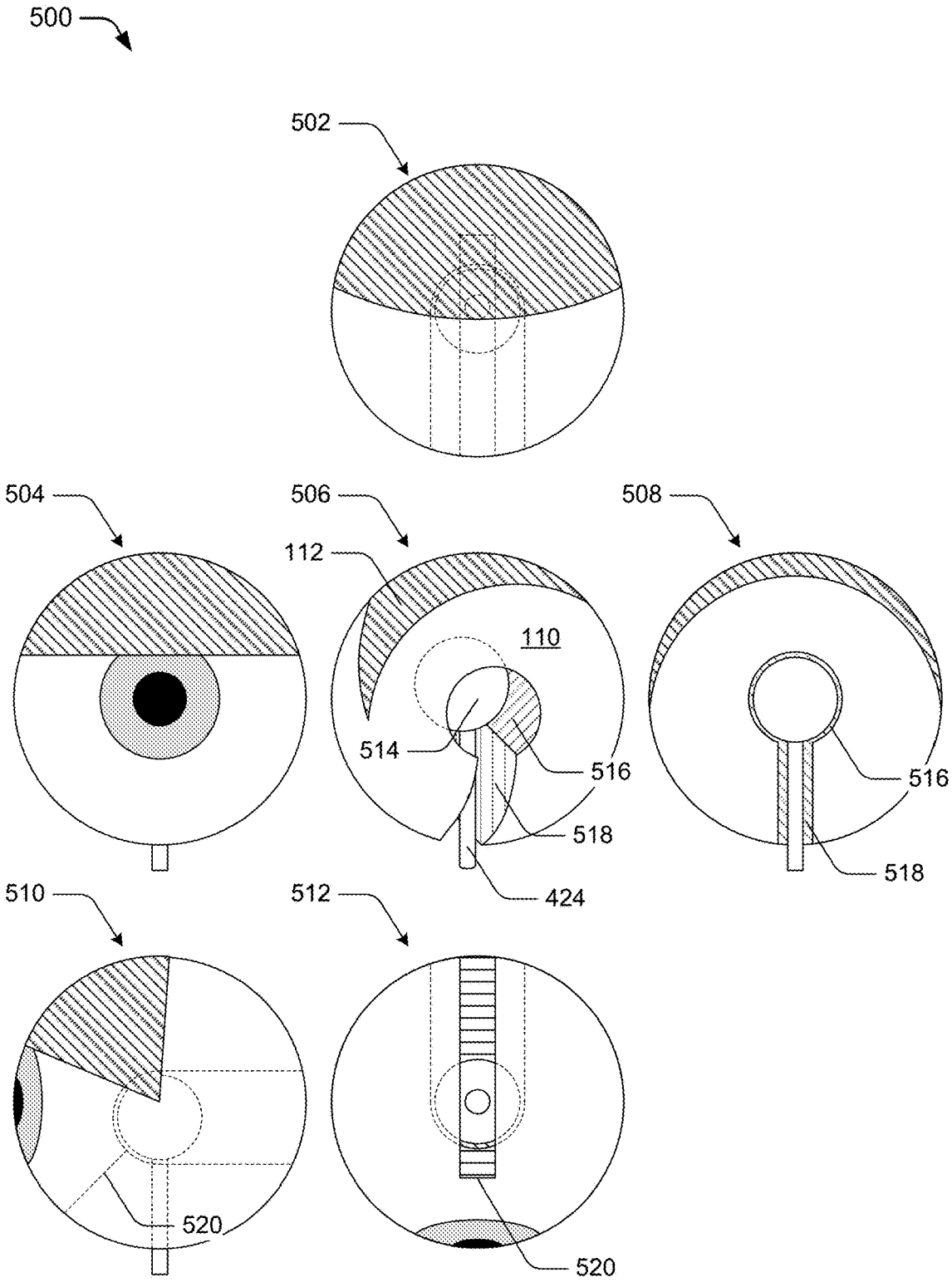

500
502
504
506
112
110
508
514
516
518
516
518
424
510
512
520
520

Fig. 5

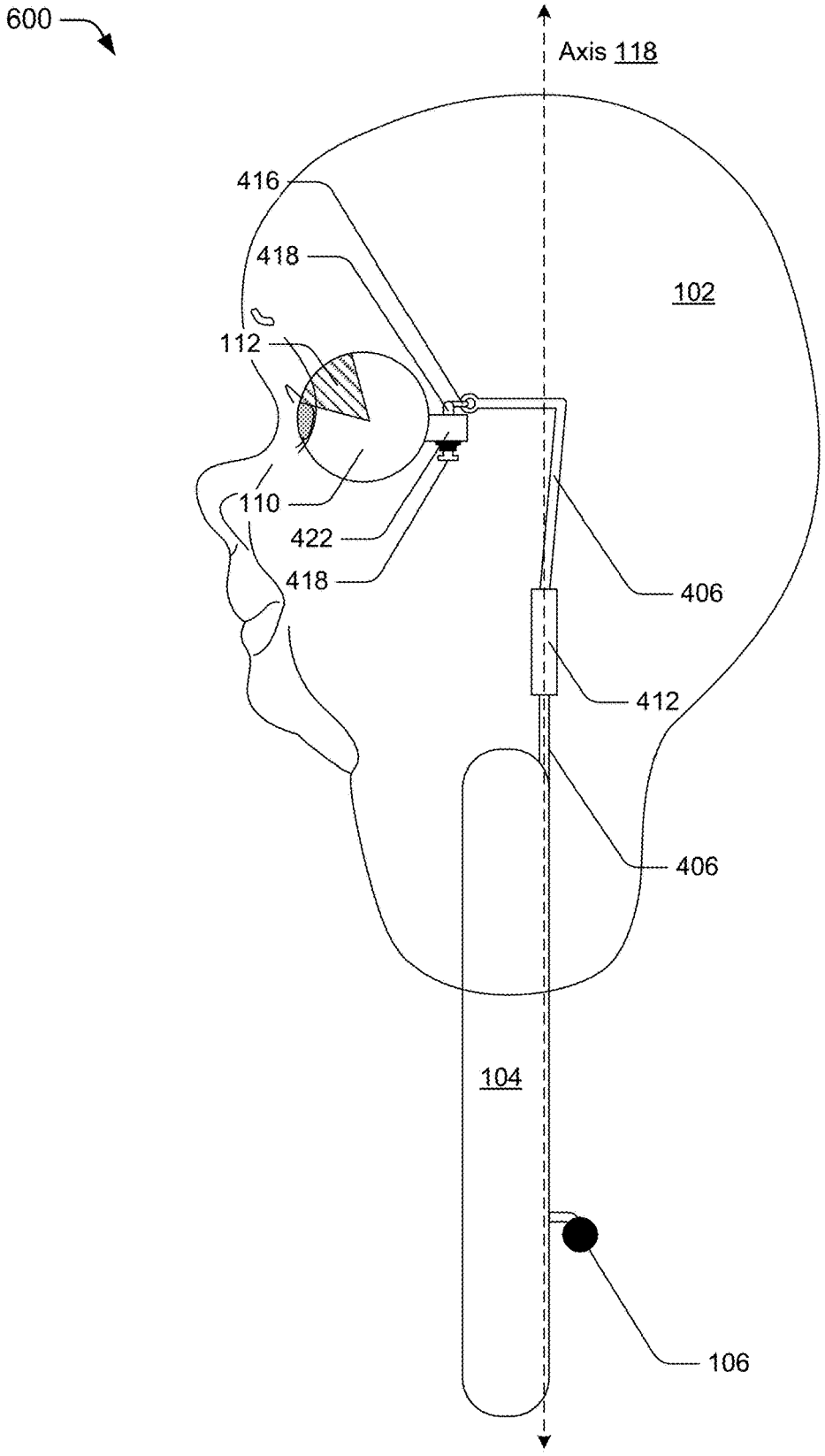


Fig. 6

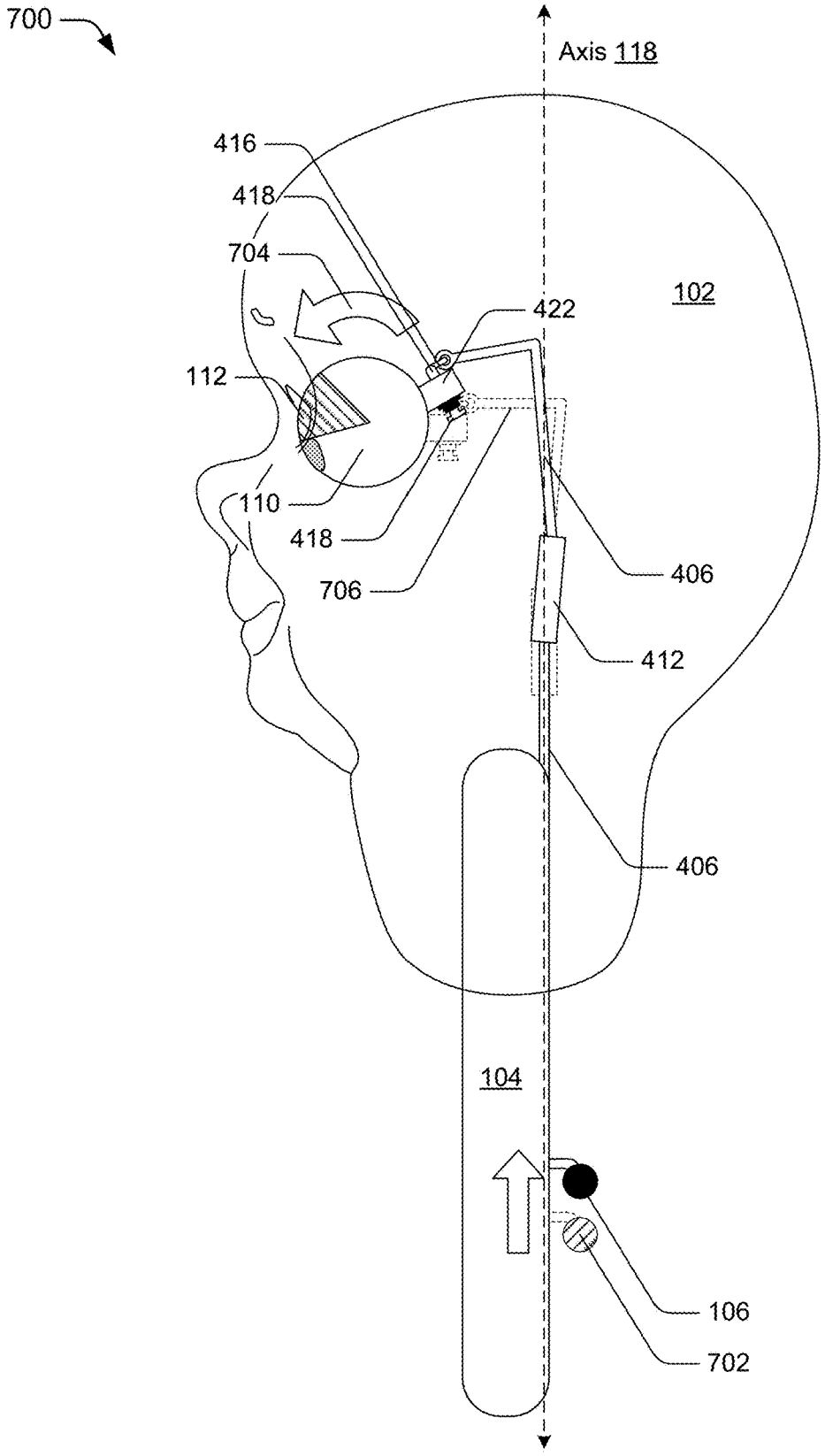

700
Axis 118
416
418
704
102
422
112
110
418
706
406
412
406
104
106
702

Fig. 7

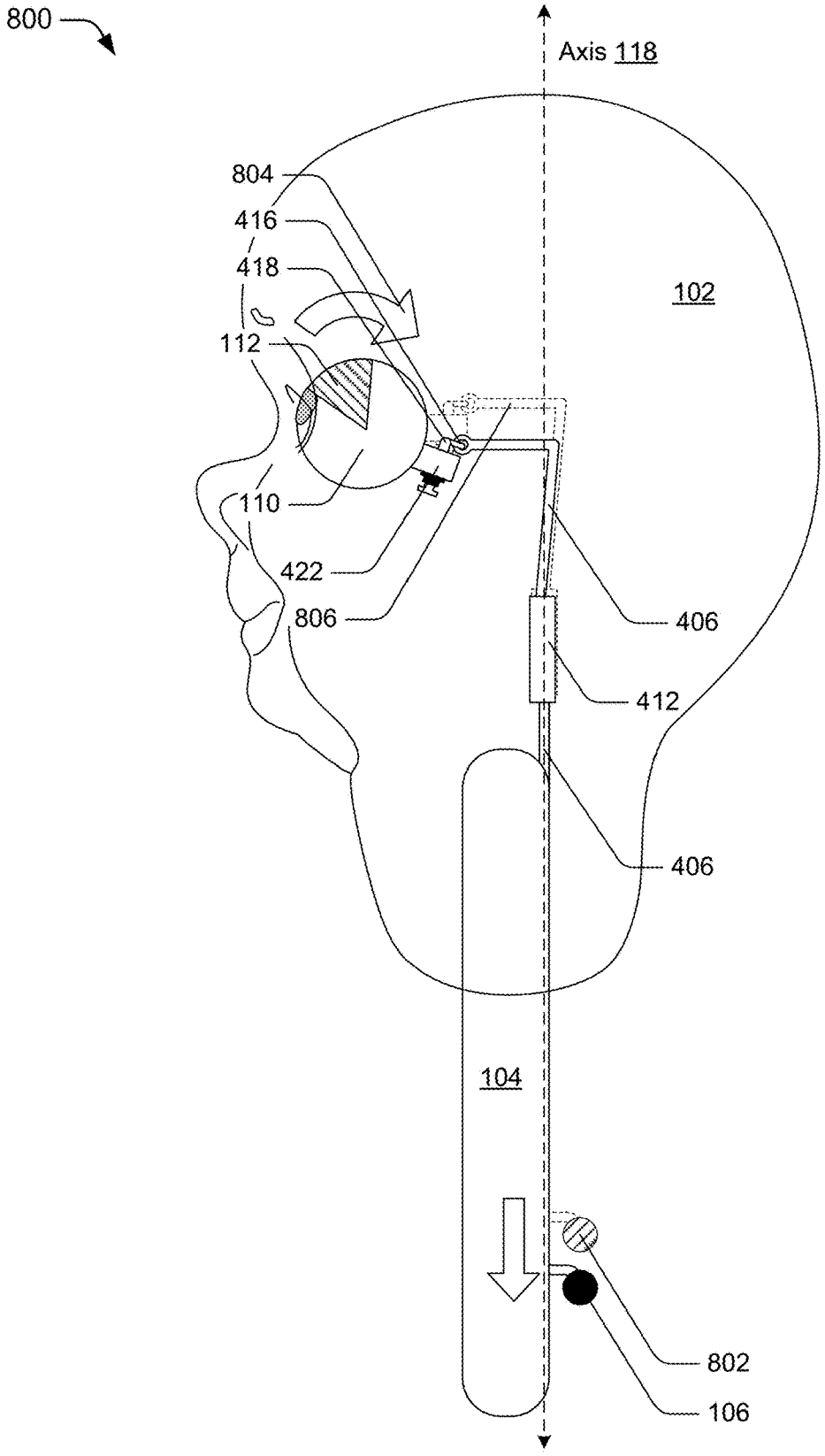

800
Axis 118
804
416
418
102
112
110
422
806
406
412
406
104
802
106

Fig. 8

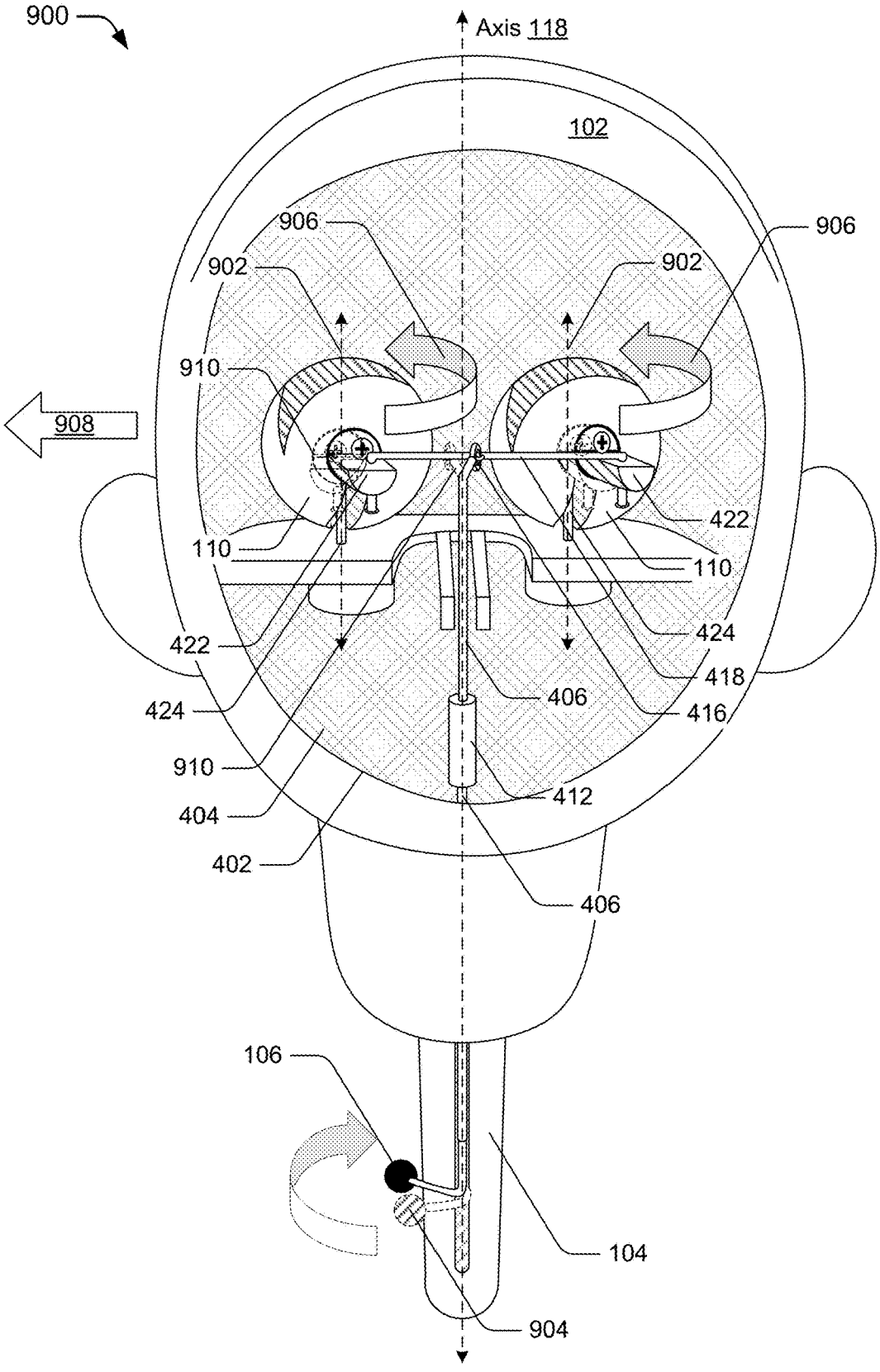

900
Axis 118
102
906
902
906
902
910
908
422
110
110
422
424
418
406
416
424
910
412
404
402
406
106
104
904

Fig. 9

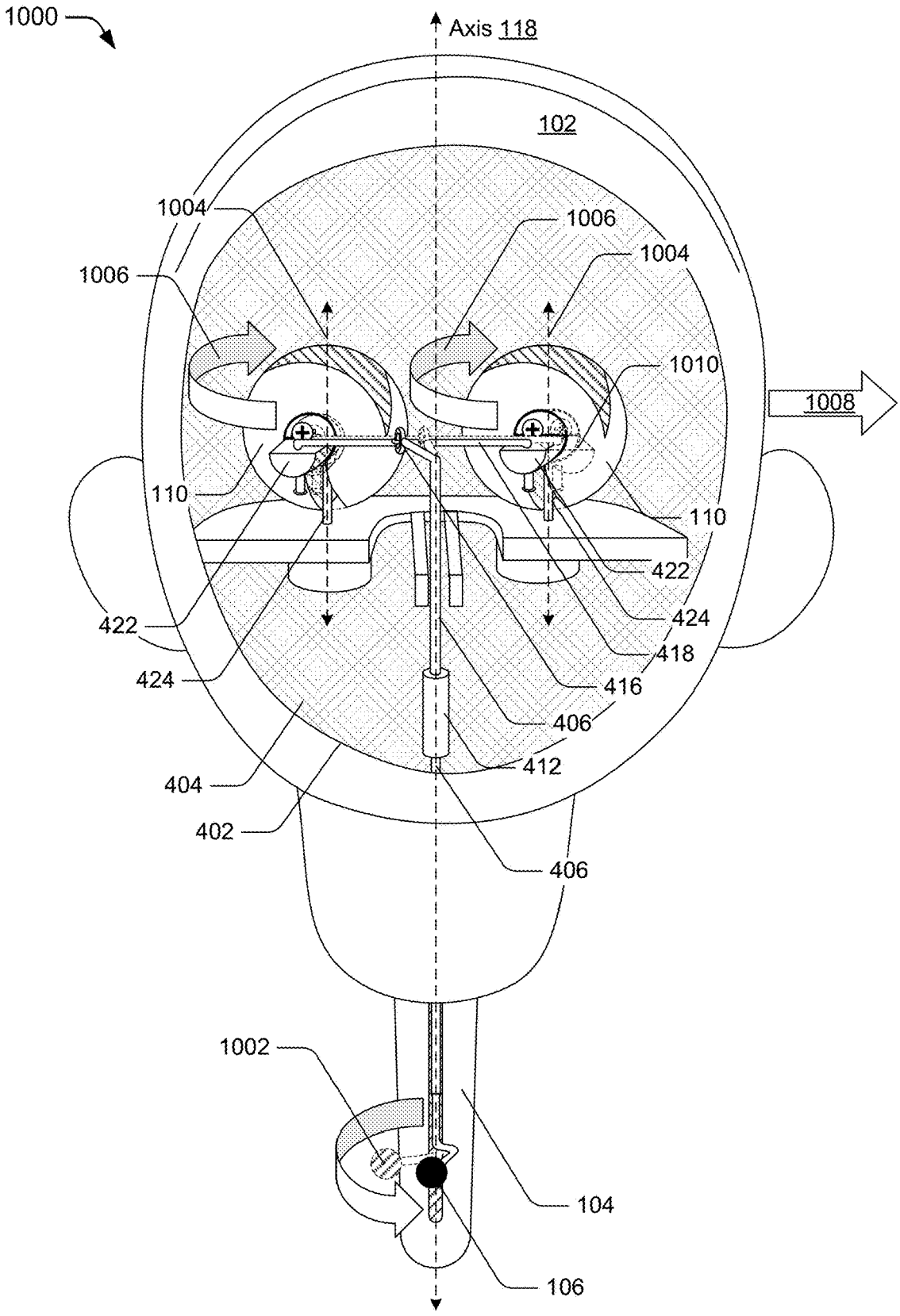

1000
Axis 118
102
1004
1006
1006
1004
1010
1008
110
110
422
422
424
424
418
416
406
412
404
402
406
1002
104
106

Fig. 10

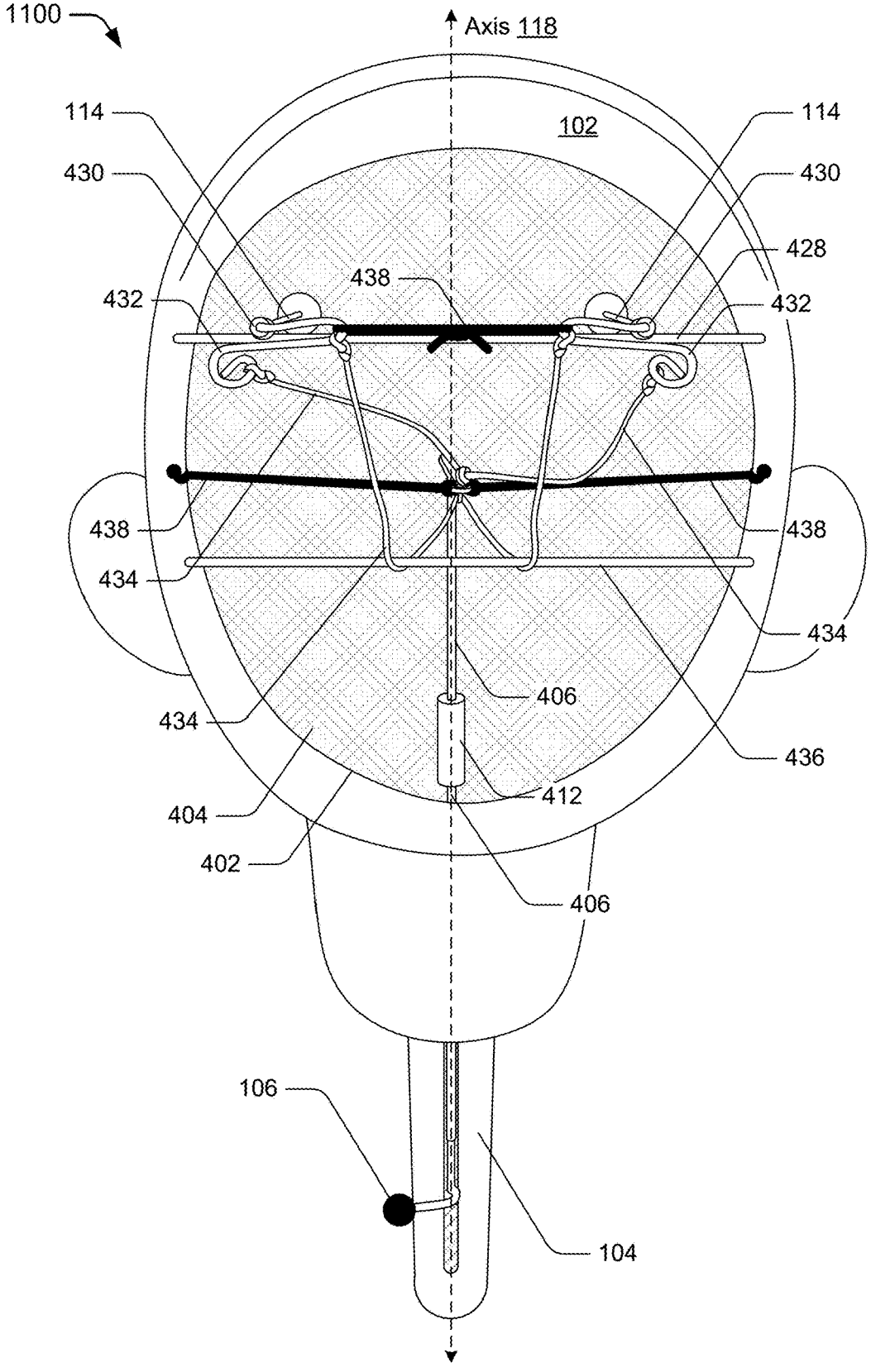

1100
Axis 118
114
102
114
430
430
428
438
432
432
438
438
434
434
406
434
436
412
404
402
406
106
104

Fig. 11

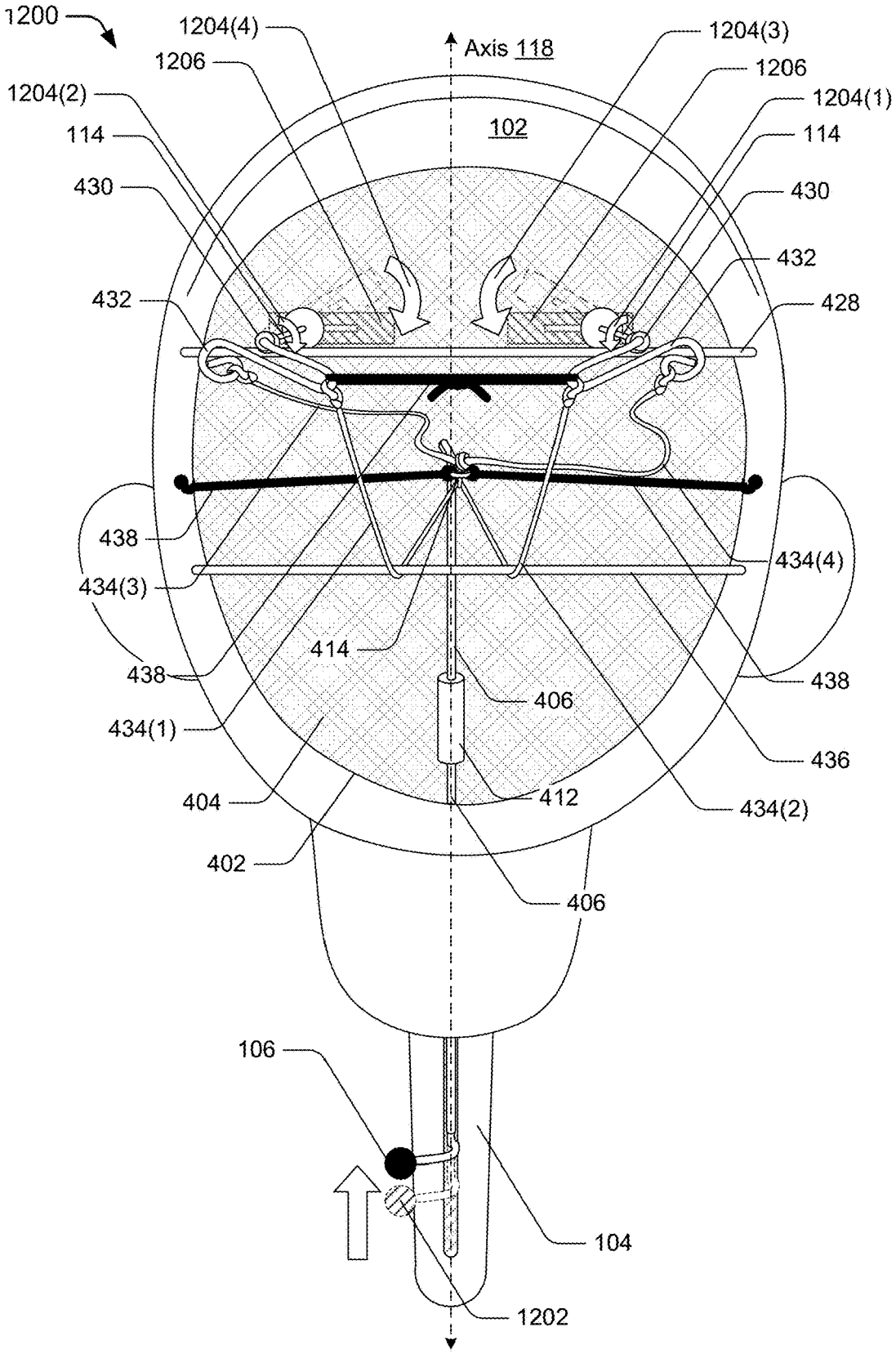

1200
1204(4)
1206
1204(2)
114
430
432
438
434(3)
438
434(1)
404
402
106
Axis 118
102
1204(3)
1206
1204(1)
114
430
432
428
434(4)
438
436
434(2)
412
406
406
414
104
1202

Fig. 12

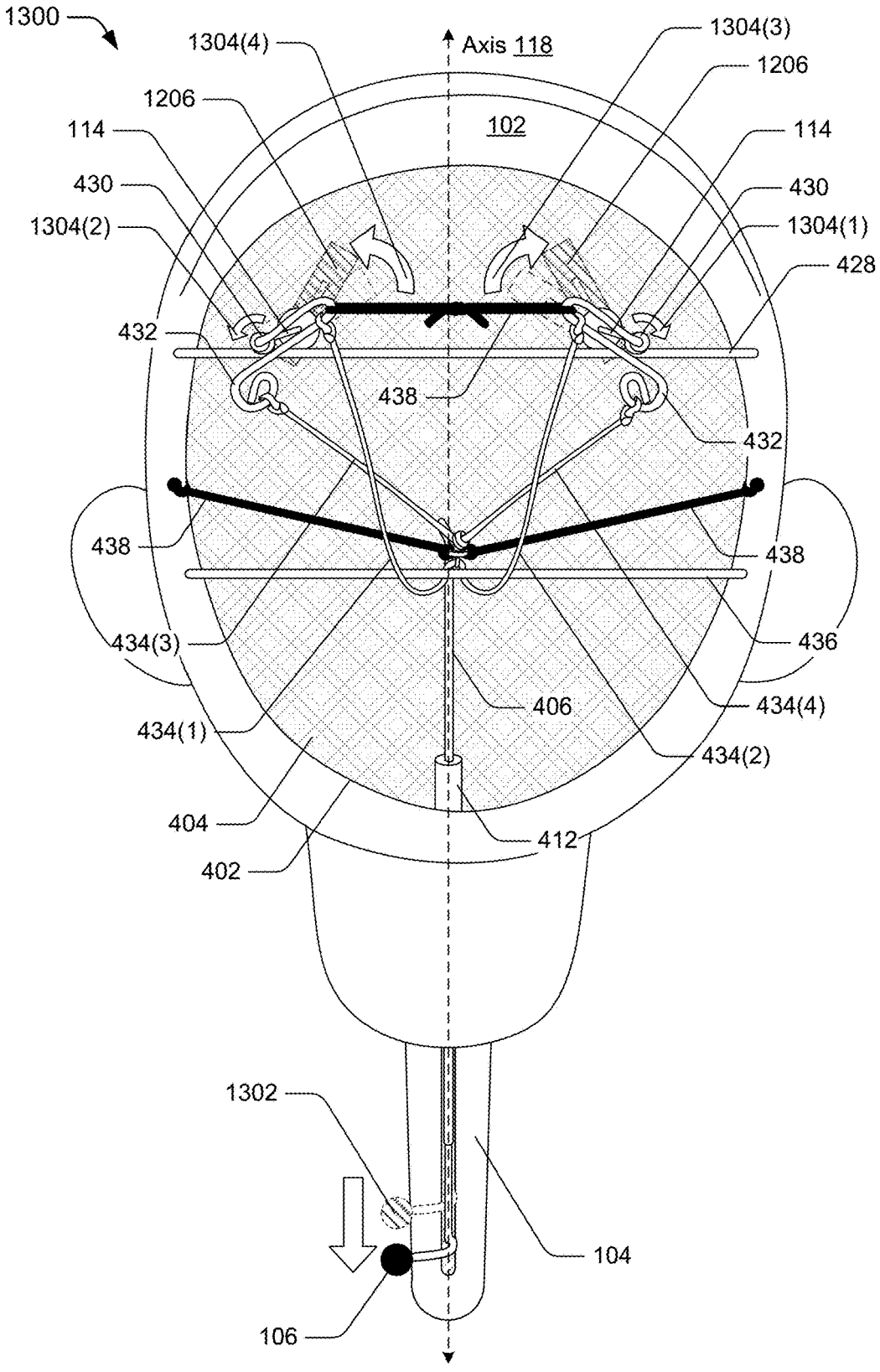

1300
1304(4)
Axis 118
1304(3)
1206
1206
102
114
114
430
430
1304(2)
1304(1)
428
432
438
432
438
438
434(3)
436
406
434(4)
434(1)
434(2)
404
412
402
1302
104
106

Fig. 13

FIGURE EXPRESSION USING A MULTI-AXIS CONTROL

BACKGROUND

[0001] Ventriloquism is a form of entertainment that involves a person (i.e., a ventriloquist) operating a prop known as a "figure" or "dummy". While some ventriloquists attempt to create the illusion that their voices are coming from the figures, other ventriloquists view this illusion as unnecessary, and these other ventriloquists focus largely on character portrayal through manipulation of their figures' expressions and the "stories" of the characters. In general, these figures are constructed so that they can be animated. By "animated" it is meant that a figure can be manipulated to imitate at least some behavior of a living creature, such as a human. These behaviors may include, for example, making various facial expressions by moving a figure's mouth (e.g., to talk), moving the figure's eyes (e.g., to look in different directions, blink, wink, and so on), and moving the figure's eyebrows, to name just a few. Despite the entertainment ventriloquism provides, it is not widely practiced, in part, because learning how to manipulate controls of conventional figures, so that the figures make lifelike facial expressions, is time consuming. It can take years.

[0002] By way of example, conventional figures may include a multitude of controls used in connection with moving a figure's eyes, such as a control to move the eyes side-to-side, a separate control to move a right eye up and down, a separate control to move a left eye up and down, a separate control to wink a right eyelid, a separate control to wink a left eyelid, a separate control to blink both eyelids, and separate controls to raise and lower eyebrows. In order to produce lifelike expressions with a conventional figure, a ventriloquist must often operate multiple such controls simultaneously. Operating multiple controls simultaneously requires a ventriloquist to use fingers in addition to his or her thumb and forefinger, and also requires the ventriloquist's hand be at least a certain size, e.g., to reach the different controls simultaneously. Most people naturally are not dexterous with those additional fingers, however. In order to acquire suitable dexterity in their fingers to produce lifelike expressions, most ventriloquists spend countless hours practicing. Additionally, many people who may be interested in ventriloquism (e.g., children) may not have large enough hands to operate multiple such controls simultaneously. The controls of conventional figures therefore limit not only the number of people that practice ventriloquism but also the number of people that even attempt to operate a figure.

SUMMARY

[0003] To overcome these problems, a multi-axis control is used to control figure expression. In one or more implementations, a figure (e.g., a ventriloquism figure) includes a head having eyeballs, eyelids, and eyebrows. A multi-axis control is integral with the head and is configured to control the eyeballs, the eyelids, and the eyebrows responsive to manipulation of the multi-axis control by a hand of a person. In contrast to conventional approaches, the eyeballs, the eyelids, and the eyebrows of the figure are controlled only by the multi-axis control. Indeed, the multi-axis control is configured to control the eyeballs, the eyelids, and the eyebrows without application of force by a hand to any other control of the figure. The head may be integral with a superior end of a headstick that is configured to be held by fingers of the person's hand. Further, the multi-axis control may be configured to be manipulated—to control the eyeballs, eyelids, and eyebrows—by only a thumb of the person's hand while the headstick is held in the fingers of the person's hand.

[0004] This Summary introduces a selection of concepts in a simplified form that are further described below in the Detailed Description. As such, this Summary is not intended to identify essential features of the claimed subject matter, nor is it intended to be used as an aid in determining the scope of the claimed subject matter.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] The detailed description is described with reference to the accompanying figures.

[0006] FIG. **1** is an illustration of a figure head in an example implementation with a multi-axis control configured to control expressions of the figure.

[0007] FIG. **2** depicts a side view of a figure head with the multi-axis control.

[0008] FIG. **3** depicts different expressions of the figure that are based on manipulation of the multi-axis control.

[0009] FIG. **4** depicts a posterior view of the figure head having an opening to a cavity in which components of the figure, which may be actuated in connection with controlling expressions of the figure, are disposed.

[0010] FIG. **5** depicts different views of an example eyeball of the figure and shows the eyeball disposed on a ball affixed atop a post.

[0011] FIG. **6** depicts a transparent side view of the figure head in which some of the components in the cavity are disposed in default positions.

[0012] FIG. **7** depicts a transparent side view of the figure head showing actuation of some of the components in the cavity based on manipulation of the multi-axis control.

[0013] FIG. **8** depicts a transparent side view of the figure head showing actuation of some of the components in the cavity based on manipulation of the multi-axis control in an opposing direction.

[0014] FIG. **9** depicts a posterior view of the figure head having an opening to a cavity showing transversal rotation of the eyeballs in a first direction based on a rotational manipulation of the multi-axis control.

[0015] FIG. **10** depicts a posterior view of the figure head having an opening to a cavity showing transversal rotation of the eyeballs in second direction based on a rotational manipulation of the multi-axis control in an opposing direction.

[0016] FIG. **11** depicts a posterior view of the figure head having an opening to a cavity in which some of the components in the cavity are disposed in default positions.

[0017] FIG. **12** depicts a posterior view of the figure head having an opening to a cavity showing actuation of eyebrows based on manipulation of the multi-axis control.

[0018] FIG. **13** depicts a posterior view of the figure head having an opening to a cavity showing actuation of the eyebrows based on manipulation of the multi-axis control in an opposing direction.

DETAILED DESCRIPTION

[0019] Overview

[0020] Ventriloquism is not widely practiced, in part, because learning how to manipulate controls of conventional figures, so that those figures make lifelike facial expressions, is time consuming. It can take years. By way of example, conventional figures may include a multitude of controls used in connection with moving the figure's eyes, such as a control to move the eyes side-to-side, a separate control to move a right eye up and down, a separate control to move a left eye up and down, a separate control to wink a right eyelid, a separate control to wink a left eyelid, a separate control to blink both eyelids, and separate controls to raise and lower eyebrows. In order to produce lifelike expressions with a conventional figure, a ventriloquist must often operate multiple such controls simultaneously. These controls limit not only the number of people that practice ventriloquism but also the number of people that even attempt to operate a figure.

[0021] Figure expression using a multi-axis control is described herein. Rather than controlling a figure's expression with multiple (e.g., five or more) controls, as in conventional configurations, the multi-axis control is a single control that, responsive to manipulation, is configured to actuate side-to-side movement of the figure's eyes, up-and-down movement of the figure's eyes, smooth circular movement of the figure's eyes (e.g., eye rolling), blinking, and eyebrow raising and lowering. Moreover, a person may manipulate this multi-axis control using just his or her thumb, as shown in the figures and described in more detail below.

[0022] By actuating side-to-side eye movement, up-and-down eye movement, roll-around eye movement, blinking, and eyebrow raising and lowering, with a single, easy-to-manipulate control, a figure configured as described herein may be operable with little practice. Indeed, a person may be able to manipulate the multi-axis control to produce lifelike expressions with the figure's eyes, eyelids, and eyebrows with mere seconds or minutes of experimentation rather than needing years of practice. Due to this, figures configured with a multi-axis control as described herein reduce at least one of the barriers to entry of ventriloquism. As such, configuring ventriloquism figures with a multi-axis control may increase a number of people that attempt to operate those figures. When those people are able to easily manipulate the figures to produce lifelike expressions, due to the multi-axis control, the number of people that practice ventriloquism (and thus purchase such figures) may also expand.

[0023] In the following discussion, an example figure head is described by way of example as being operated based on manipulation of a multi-axis control by a person's hand. However, it should be readily apparent that the following discussion is not limited to manipulation of the multi-axis control by a person's hand. The multi-axis control may be manipulated in other ways to produce expressions of a figure without departing from the spirit or scope of the described techniques.

[0024] Example Figure Head

[0025] FIG. **1** is an illustration of an example implementation **100** of a figure head with a multi-axis control configured to control expressions of the figure. The illustrated example **100** includes figure head **102**, which is disposed on headstick **104**. The illustrated example **100** also includes multi-axis control **106** on which a thumb of a person's hand **108** is disposed.

[0026] In one or more implementations, a control rod extends from the multi-axis control **106** through the headstick **104** and into the figure head **102** to actuate the figure's eyeballs **110**, eyelids **112**, and eyebrow control rods **114**. As discussed in more detail below, the eyeballs **110** and eyelids **112** are disposed within the figure head **102**, which has eye holes **116** through which the eyeballs **110** and eyelids **112** can be seen, such as when looking at the figure's face. The eyebrow control rods **114** are disposed at least partially within the figure head **102** and extend through holes in the head so that they are also disposed at least partially outside the figure head **102**. Eyebrows (not shown) may be attached to the eyebrow control rods **114** such that actuation of the eyebrow control rods **114** causes the eyebrows to move, e.g., raise and lower.

[0027] The control rod is disposed substantially along an axis **118** that extends from a bottom of the headstick **104** through a top of the figure head **102**. Also depicted in this example **100** is axis **120**, which is substantially perpendicular to the axis **118**. The axis **120** extends through both sides of the head as well as substantially through centers of both eyeballs **110**. The illustrated example **100** further includes coordinate axes **122**, in relation to which movement of the eyeballs **110** is discussed.

[0028] In the following discussion, consider the movement of each of the eyeballs **110** in relation to respective coordinate axes **122**, such that an origin of first coordinate axes **122** is substantially centered at a center of the left eyeball **110** and an origin of second coordinate axes **122** is substantially centered at a center of the right eyeball **110**. The x-axis of the first and second coordinate axes **122** corresponds to the axis **120**. The y-axis of the first coordinate axes **122** corresponds to an axis that is substantially parallel to the axis **118** and the y-axis of the second coordinate axes **122** corresponds to another axis that is substantially parallel to the axis **118**.

[0029] In accordance with the described techniques, the eyeballs **110** are configured to rotate up and down substantially around the x-axis of the respective coordinate axes **122**—a movement in the sagittal plane. In one or more implementations, the eyeballs **110** are configured to rotate up and down together, such that the left eyeball **110** is actuated to rotate up a same amount that the right eyeball **110** is actuated to rotate up and such that the left eyeball **110** is actuated to rotate down a same amount that the right eyeball **110** is actuated to rotate down, e.g., depending on manipulation of the multi-axis control **106**.

[0030] In addition, each of the eyeballs **110** is configured to rotate side-to-side substantially around a y-axis of the respective coordinate axes **122**—movement in the transverse plane. In contrast to sharing an axis, as in the up-and-down rotation, the side-to-side rotation is substantially around the y-axis of a given eyeball **110**'s respective coordinate axes **122**. Nevertheless, an amount the eyeballs **110** rotate side-to-side around their respective y-axes matches substantially. Such movement generally imitates real life movement of eyes, where both eyes generally rotate to the left when a person looks left and both eyes generally rotate to the right when a person looks look to the right. In addition to up-and-down and side-to-side movement, the eyeballs

110 are also configured to rotate around, e.g., to roll the figure's eyes, as discussed in more detail in relation to FIG. **3**.

[0031] FIG. **2** depicts a side view **200** of a figure head with the multi-axis control. The side view **200** includes from FIG. **1** the figure head **102**, the headstick **104**, the multi-axis control **106**, and the hand **108**. The side view **200** also depicts the left eyeball **110** and the left eyebrow control rod **114**.

[0032] In the illustrated side view **200**, the axis **118** is depicted toward a posterior of the headstick **104**. This may correspond to scenarios in which a control rod, extending from the multi-axis control **106** and into the figure head **102**, is disposed in a channel routed into a posterior of the headstick **104**, where a depth of the channel allows the multi-axis control **106** to be manipulated by the hand **108** rotationally around the axis **118**. In one or more implementations, this channel may have a depth that ranges from a depth corresponding to the control rod's radius to a depth corresponding to double the control rod's diameter. It is to be appreciated that the axis **118** may be located further toward the front of the figure head **102** in one or more implementations without departing from the spirit or scope of the described techniques.

[0033] The illustrated side view **200** also includes point **202**, which may correspond to the axis **120**. Accordingly, the eyeballs **110** may rotate in the sagittal plane around the axis **120** corresponding to the point **202**, e.g., to look down, to close the eyes, or to look up. In the context of different expressions, the multi-axis control **106** can cause the figure to produce, consider the following discussion of FIG. **3**.

[0034] FIG. **3** depicts examples **300** of different expressions of the figure that are based on manipulation of the multi-axis control. In particular, the illustrated examples **300** depict different expressions of the figure head **102** that can be produced by manipulating the multi-axis control **106** to actuate the eyeballs **110**, the eyelids **112**, and the eyebrow control rods **114** of the figure.

[0035] The illustrated examples **300** include a default expression **302**, a right-looking expression **304**, a left-looking expression **306**, an up-looking expression **308**, a down-looking expression **310**, a right-and-up looking expression **312**, a right-and-down looking expression **314**, a left-and-up looking expression **316**, and a left-and-down looking expression **318**. It is to be appreciated that a figure may be configured to produce additional expressions based on manipulation of the multi-axis control **106** without departing from the spirit or scope of the described techniques.

[0036] In one or more implementations, the figure is configured to produce the default expression **302** when the multi-axis control **106** is not manipulated, e.g., no force is applied to the multi-axis control **106** to slide the control rod up or down, no force is applied to the control rod to rotate it either direction in the transverse plane, and so forth. The default expression **302** may be produced, in part, by biasing various components of the figure head **102** in positions that correspond to the default expression **302**. Although the default expression **302** is depicted as being a straightforward looking expression, it should be appreciated that a figure's components may be biased in different positions without departing from the spirit or scope of the described techniques, such that a default expression may correspond to other expressions (including any one of the illustrated examples). Manners in which the components may be biased to return to a default expression—absent application of force to the multi-axis control **106**—are discussed further below. Moreover, the eyeballs **110**, the eyelids **112**, and the eyeball control rods **114** are configured to remain substantially in default positions absent manipulation of the multi-axis control **106** from its default position.

[0037] The multi-axis control **106** is configured, responsive to manipulation, to actuate the eyeballs **110** and the eyelids **112** to rotate in the transversal plane to the right to produce the right-looking expression **304**. In one or more implementations, this manipulation involves application of a force to the multi-axis control **106** to cause the control rod extending from the multi-axis control **106** to rotate, e.g., to rotate in the transversal plane but in an opposing direction to the rightward rotation of the eyeballs **110**. This motion of the eyeballs **110** and the eyelids **112** as well as the corresponding manipulation of the multi-axis control **106** is depicted in FIG. **10**. The arrow between the right-looking expression **304** and the default expression **302** indicates that the default expression **302** can be produced from the right-looking expression **304**, such as based on return of the multi-axis control **106** to a position in which it is disposed in connection with producing the default expression **302**.

[0038] The multi-axis control **106** is also configured, responsive to manipulation, to actuate the eyeballs **110** and the eyelids **112** to rotate in the transversal plane to the left to produce the left-looking expression **306**. In one or more implementations, this manipulation involves application of a force to the multi-axis control **106** to cause the control rod extending from the multi-axis control **106** to rotate, e.g., to rotate in the transversal plane but in an opposing direction to the leftward rotation of the eyeballs **110**. This motion of the eyeballs **110** and the eyelids **112** as well as the corresponding manipulation of the multi-axis control **106** is depicted in FIG. **9**. The arrow between the left-looking expression **306** and the default expression **302** indicates that the default expression **302** can be produced from the left-looking expression **306**, such as based on return of the multi-axis control **106** to a position in which it is disposed in connection with producing the default expression **302**.

[0039] Movement of the eyeballs **110** and eyelids **112** between the right-looking expression **304**, the default expression **302**, and the left-looking expression **306** corresponds to "side-to-side" movement of the figure's eyes.

[0040] The multi-axis control **106** is also configured, responsive to manipulation, to actuate the eyeballs **110** and the eyelids **112** to rotate in the sagittal plan upward to produce the up-looking expression **308**. In one or more implementations, this manipulation involves application of a force to the multi-axis control **106** to cause the control rod extending from the multi-axis control **106** to slide downward, e.g., along the axis **118**. In other words, when the multi-axis control **106** is manipulated downward, the eyeballs **110** are configured to "look" up. This motion of the eyeballs **110** and the eyelids **112** as well as the corresponding manipulation of the multi-axis control **106** is depicted in FIG. **8**. The arrow between the up-looking expression **308** and the default expression **302** indicates that the default expression **302** can be produced from the up-looking expression **308**, such as based on return of the multi-axis control **106** to a position in which it is disposed in connection with producing the default expression **302**.

[0041] Zoomed view **320** depicts movement of one of the eyebrow control rods **114** in connection with the up-looking expression **308**. In particular, the zoomed view **320** depicts a rotation in the frontal plane of the right eyebrow control rod **114** such that the portion extending outside of the figure head **102** rotates counterclockwise from default position **322** (counterclockwise when looking at the figure's face). In the up-looking expression **308**, the left eyebrow control rod **114** is also illustrated rotated in the frontal plane and is rotated clockwise from a default position (clockwise when looking at the figure's face). In operation, eyebrows may be attached to the eyebrow control rods **114**, such that when the eyebrow control rods **114** rotate, as discussed in connection with the up-looking expression **308**, this rotation causes the eyebrows "raise".

[0042] The multi-axis control **106** is also configured, responsive to manipulation, to actuate the eyeballs **110** and the eyelids **112** to rotate in the sagittal plan downward to produce the down-looking expression **310**. In one or more implementations, this manipulation involves application of a force to the multi-axis control **106** to cause the control rod extending from the multi-axis control **106** to slide upward, e.g., along the axis **118**. In other words, when the multi-axis control **106** is manipulated upward, the eyeballs **110** are configured to "look" down. This motion of the eyeballs **110** and the eyelids **112** as well as the corresponding manipulation of the multi-axis control **106** is depicted in FIG. **7**. The arrow between the down-looking expression **310** and the default expression **302** indicates that the default expression **302** can be produced from the down-looking expression **310**, such as based on return of the multi-axis control **106** to a position in which it is disposed in connection with producing the default expression **302**.

[0043] Zoomed view **324** depicts movement of one of the eyebrow control rods **114** in connection with the down-looking expression **310**. In particular, the zoomed view **324** depicts a rotation in the frontal plane of the right eyebrow control rod **114** such that the portion extending outside of the figure head **102** rotates clockwise from the default position **322** (clockwise when looking at the figure's face). In the down-looking expression **310**, the left eyebrow control rod **114** is also illustrated rotated in the frontal plane and is rotated counterclockwise from a default position (counterclockwise when looking at the figure's face). As noted above, eyebrows may be attached to the eyebrow control rods **114**, such that when the eyebrow control rods **114** rotate, as discussed in connection with the down-looking expression **310**, this rotation causes the eyebrows "lower".

[0044] In addition, as the eyeballs **110** "look" down, as in the down-looking expression **310**, the eyelids **112** rotate toward a closed position. Although the figure's eyes are shown as partially open in the down-looking expression **310**, it is to be appreciated that the multi-axis control **106** can be manipulated further to cause the figure's eyes to close fully, such that solely the eyelids **112** can be seen through the eye holes **116**. This allows the figure to "blink." As discussed herein, "blinking" refers to both eyes closing substantially simultaneously. Blinking contrasts with "winking," which refers to functionality of eyelids to operate independently of one another, such that one eyelid may be closed while another eyelid remains open, i.e., to "wink" the eye having the closed eyelid.

[0045] In one or more implementations, the multi-axis control **106** is limited to controlling the figure to blink by closing both eyelids **112** simultaneously—it is not configured to cause the figure to wink. This contrasts with conventional figures that are configured to wink and blink. Nonetheless, the limitation to blink but not wink enables the winking to be controlled by the multi-axis control **106**, without requiring the additional controls of conventional figures used to cause the winking. A fixed attachment of the eyelids **112** to the eyeballs **110**, rather than configuring the eyelids **112** to be separately controlled as in conventional techniques, further enables the multi-axis control **106** to control the figure's blinking. The fixed attachment of the eyelids **112** to the eyeballs **110** is discussed further in relation to FIG. **5**.

[0046] Movement of the eyeballs **110** and the eyelids **112** between the up-looking expression **308**, the default expression **302**, and the down-looking expression **310** corresponds to "up-and-down" movement of the figure's eyes.

[0047] The multi-axis control **106** is also configured, responsive to manipulation, to actuate the eyeballs **110** and the eyelids **112** to produce the right-and-up looking expression **312**, the right-and-down looking expression **314**, the left-and-up looking expression **316**, and the left-and-down looking expression **318**. By way of example, the multi-axis control **106** is configured to be manipulated circularly to roll the eyeballs **110** and the eyelids **112** from the right-looking expression **304** to the right-and-up looking expression **312** to the up-looking expression **308** (and in the opposing direction). It is to be appreciated that the multi-axis control **106** is configured to roll the eyeballs **110** and the eyelids **112** around to each of the just mentioned expressions. In this example **300**, such rolling is illustrated by the curved arrows.

[0048] In addition to rolling the eyes, the multi-axis control **106** is further configured to actuate the eyeballs **110** and the eyelids **112** to rotate from the positions in the default expression **302** to the right-and-up looking expression **312**, the right-and-down looking expression **314**, the left-and-up looking expression **316**, and the left-and-down looking expression **318**. These rotations are movements in a combination of the sagittal and transverse planes. The diagonal movement of the eyeballs **110** and the eyelids **112** from the default expression **302** to the right-and-up looking expression **312**, the right-and-down looking expression **314**, the left-and-up looking expression **316**, and the left-and-down looking expression **318** is further illustrated with arrows. Movement of the eyeballs **110** and the eyelids **112** around—such as between the expressions **304**, **312**, **308**—may be referred to as "roll-around" movement of the figure's eyes. Movement of the eyeballs **110** from the default expression **302** to the "corner of the eye" expressions—such as between the expressions **302**, **312** and between the expressions **302**, **316**—may be referred to as "multi-axis" movement of the figure's eyes.

[0049] As illustrated in this example **300**, the eyebrow control rods **114** are also configured to move in connection with the "corner of the eye" expressions. In the right-and-up looking expression **312** and the left-and-up looking expression **316**, for instance, the eyebrow control rods **114** are depicted rotated in the frontal plane upward and outward, e.g., to raise eyebrows. Although the eyebrow control rods **114** are depicted rotating upward in those corner of the eye expressions substantially a same amount as in the up-looking expression **308**, it is to be appreciated that the eyebrow control rods **114** may rotate a different amount in

a corner of the eye expression. By way of example, the right eyebrow control rod **114** may be configured to rotate a greater absolute number of radians than the left eyebrow control rod **114** in the right-and-up looking expression **312**. Similarly, the left eyebrow control rod **114** may rotate a greater absolute number of radians than the right eyebrow control rod **114** in the left-and-up looking expression **316**. The eyebrow control rods **114** may also rotate a different amount in the downward corner of the eye expressions.

[0050] Accordingly, the multi-axis control **106** can be manipulated to cause all of: side-to-side movement of a figure's eyes, up-and-down movement of the figure's eyes, and roll-around movement of the figure's eyes. The multi-axis control **106** can also be manipulated to move the eyelids **112** (e.g., to close them and/or blink) and to move eyebrows (e.g., to raise and lower them due to rotation of the eyebrow control rods **114**). In this way, the person's hand **108** can manipulate solely the multi-axis control **106** to cause all of those movements without manipulation of a second control.

[0051] It is to be appreciated that the multi-axis control **106** may also be configured to control different combinations of these movements in one or more implementations. By way of example, a figure may not include eyebrows or may not include moveable eyebrows in some implementations. In such cases, the multi-axis control **106** may nevertheless be manipulated to control the above-noted movement of the figure's eyeballs **110** and eyelids **112**. The multi-axis control **106** may be configured to control other combinations of the above-discussed movements without departing from the spirit or scope of the described techniques. It is further to be appreciated that a figure having the multi-axis control may be configured with additional controls to control body parts of the figure in addition to its eye-related body parts, such as a mouth of the figure, arms and legs of the figure, and so forth. Consider now one example implementation of the figure head **102** to enable the above-discussed movements with a single control (i.e., the multi-axis control **106**) in the context of FIG. **4**.

[0052] FIG. **4** depicts a posterior view **400** of the figure head having an opening to a cavity in which components of the figure, which may be actuated in connection with controlling expressions of the figure, are disposed.

[0053] The illustrated view **400** depicts an example of the figure head **102** from its posterior. The view **400** also includes the headstick **104**, the multi-axis control **106**, the eyeballs **110** having the eyelids **112**, and the eyebrow control rods **114**. For reference, the view also depicts the axis **118**. In this example **400**, the figure head **102** includes an opening **402** to a cavity **404** within the figure head **102** and where components of the figure are at least partially disposed, including the eyeballs **110** with the eyelids **112** and the eyebrow control rods **114**.

[0054] In this example **400**, control rod **406** extends from the multi-axis control **106** substantially along the axis **118** into the cavity **404** of the figure head **102**. The control rod **406** is partially sheathed within guide tube **408**, which is disposed in channel **410**. The channel **410** may be configured as a track, routed out of the headstick **104** in one or more implementations. From the multi-axis control **106**, the control rod **406** extends substantially along the axis **118** through flexible joint **412** to first pivot point **414**. Within the flexible joint **412**, the control rod **406** may be discontinuous, such that a portion of the control rod **406** from the multi-axis control **106** to the flexible joint **412** comprises a first piece and a portion of the control rod **406** from the flexible joint **412** through the first pivot point **414** comprises a second piece. In one or more implementations, the control rod **406** is made of a substantially rigid material, e.g., brass. The guide tube **408** also may be made of a substantially rigid material.

[0055] The flexible joint **412** is configured to allow an angle between the first portion of the control rod **406** and the second portion of the control rod **406** to change, such as to enable the eyeballs **110** to roll up (e.g., as in the up-looking expression **308**) and down (e.g., as in the down-looking expression **310**). This flexion and extension is discussed further below in relation to FIGS. **7** and **8**. The flexible joint **412** may be formed of a variety of materials to enable this flexion and extension, such as heat-shrink tubing.

[0056] At the first pivot point **414**, the control rod **406** turns substantially perpendicular to the axis **118** toward a front of the figure head **102** (e.g., the face). The control rod **406** extends from the first pivot point **414** to second pivot point **416**. At the second pivot point **416**, the control rod **406** interfaces with yoke **418**. Between the flexible joint **412** and the first pivot point **414**, the control rod **406** is saddled by guideposts **420**. The saddle formed by the guideposts **420** limits side-to-side shifting of the control rod **406** due to manipulation of the multi-axis control **106**, such as manipulation to actuate the eyeballs **110** to rotate side-to-side. By limiting the side-to-side shifting of the control rod **406**, the guideposts **420** enable energy to be transferred instead to side-to-side rotation of the eyeballs **110**, e.g., rotation in the transverse plane.

[0057] The yoke **418** interfaces with a yoke post **422** of each eyeball **110**. Further, the eyeballs **110** may be disposed on eyeball posts **424**. Inferior ends of the eyeball posts **424** may be mounted to headboard **426**. In one or more implementations, the eyeball posts **424** are mounted in a fixed position—the eyeball posts **424** are not configured to rotate. Rather, balls (not shown) may be fixed to superior ends of the eyeball posts **424**, forming ball and socket joints with cavities of the eyeballs **110**, as discussed below in relation to FIG. **5**. In one or more implementations, the balls fixed to the superior ends of the eyeball posts **424** also are not configured to rotate.

[0058] The yoke **418** spans substantially along an axis (not shown) between the yoke posts **422**. At the interface of the yoke **418** and the yoke posts **422**, the yoke **418** takes a downward turn, such that each end of the yoke **418** passes through a hole of a respective yoke post **422**. The interface between the yoke **418** and the yoke posts **422** may be suitably loose to allow the yoke posts **422** to rotate around the respective ends of the yoke **418**. However, a force applied to shift the yoke **418** in a direction (e.g., to the left or right) causes the yoke **418**'s ends to be disposed against walls of the respective yoke post **422**'s interfacing holes, such that both of the yoke posts **422** also shift in the direction and cause the eyeballs **110** to rotate around the eyeball posts **424**.

[0059] The illustrated view **400** also includes eyebrow crossbar **428**, eyebrow control rod saddles **430**, and eyebrow fulcrums **432**. The eyebrow crossbar **428** may be configured to support the eyebrow control rods **114** and their actuation based on rotation of the eyebrow fulcrums **432**. The eyebrow control rod saddles **430** may be mounted on the eyebrow crossbar **428**. The eyebrow control rod saddles **430** are configured to limit movement of the eyebrow control rods

114 to rotational movement in the frontal plane—around a respective axis that extends substantially from a front of the figure head **102**, where the eyebrow control rod **114** passes through a hole in a face of the figure head **102**, to the respective eyebrow control rod saddle **430**. The eyebrow control rod saddles **430** may be configured as loops through which the eyebrow control rods **114** extend to interface with the eyebrow fulcrums **432**. The eyebrow fulcrums **432** are configured to rotate based on application of tension to cords **434**, which may be due to one or more manipulations of the multi-axis control **106**. Application of this tension is discussed in more detail in relation to FIGS. **11-13**.

[0060] The illustrated view **400** also includes lower cord crossbar **436**, around which at least some of the cords **434** may be disposed. By way of example, a first set of the cords **434** may originate at connections with medial portions of a respective eyebrow fulcrum **432**, pass beneath the lower cord crossbar **436** from a posterior to an anterior side, and terminate at a connection point that is attached to the control rod **406** and that is disposed substantially at the first pivot point **414**. A second set of the cords **434** may originate at connections with lateral portions of a respective eyebrow fulcrum **432** and also terminate at the connection point that is attached to the control rod **406** at the first pivot point **414**. In contrast to the first set of cords **434**, thought, the second set may not pass underneath the lower cord crossbar **436**.

[0061] The illustrated view **400** also includes tensioners **438**. The tensioners **438** may have generally elastic properties, such that the tensioners **438** are configured to expand suitably to allow for rotation of the control rod **406** and the eyebrow fulcrums **432** and also so that the tensioners **438** are configured to return the components of the figure to default positions absent application of force. In one or more implementations, the tensioners **438** are configured to dispose the components of the figure to default positions to produce the default expression **302**. The tensioners **438** may be various materials without departing from the spirit or scope of the described techniques, such as bungee cords, shock cord, piano spring wire, and so forth. Turning now to a discussion of an example implementation of an eyeball **110** in accordance with the described techniques.

[0062] FIG. **5** depicts different views **500** of an example eyeball of the figure and show the eyeball disposed on a ball affixed atop a post.

[0063] In particular, the different views **500** of the eyeball **110** include top view **502**, front view **504**, rear projection view **506**, rear view **508**, left-side view **510**, and bottom view **512**. These different views depict the eyeball **110** having the eyelid **112** attached. This contrasts with conventional ventriloquism figures, which do not have eyelids attached to eyeballs. As noted above, conventional ventriloquism figures are constructed with eyelids that are separate from the eyeballs and controlled using additional controls from eyeball controls. By attaching the eyelid **112** to the eyeball **110**, movement of a figure's eyes imitates real life—when a real person or animal looks down its eyelids close at least partially. In addition, the attachment of the eyelids **112** to the eyeballs **110** enables the eyelids **112** to be controlled by the multi-axis control **106** along with controlling the eyeballs **110**.

[0064] The different views **500** also depict the respective eyeball post **424** of the eyeball **110**. Ball **514** is depicted affixed at a superior end of the eyeball post **424**. Here, the ball **514** is disposed within cavity **516** of the eyeball **110**, forming a "ball and socket" joint with the eyeball **110**. The different views **500** also depict channel **518**. The channel **518** restricts rotation of the eyeball **110** on the ball and socket joint to movements where the channel swings over the eyeball post **424**, e.g., to rotate the eyeball **110** up and down. The channel **518** may also restrict the movement of the eyeball **110** at least partially in the sagittal plane (to move the eyeball **110** up and down), such as when the eyeball **110** is rotated downward until a front channel wall **520** of the eyeball **110** contacts the eyeball post **424**.

[0065] FIG. **6** depicts a transparent side view **600** of the figure head in which some of the components in the cavity are disposed in default positions.

[0066] The transparent side view **600** depicts the figure head **102** from a left side. In this view **600**, a side housing of the head is transparent so that various components disposed within the cavity **404** of the figure head **102** are visible. The figure's components depicted in the transparent side view **600** include the headstick **104**, the multi-axis control **106**, the control rod **406**, the flexible joint **412**, the interface between the control rod **406** and the yoke **418** at the second pivot point **416**, the yoke post **422** of the left eyeball **110**, and the eyelid **112** statically fixed to the eyeball **110**. This view **600** represents a scenario where those components are disposed in default positions, such as where no force is applied to the multi-axis control **106**. By way of example, the disposition of the components in the default positions may correspond to the default expression **302**.

[0067] FIG. **7** depicts a transparent side view **700** of the figure head showing actuation of some of the components in the cavity based on manipulation of the multi-axis control.

[0068] In the transparent side view **700** the figure head **102** is depicted from a left side and is transparent so that the various components discussed in relation to FIG. **6** are visible. In contrast to FIG. **6** though, the components are depicted actuated in the transparent side view **700**, e.g., based on an upward shift or sliding of the multi-axis control **106**. Here, the multi-axis control **106** is depicted shifted upward substantially along the axis **118** from default position **702**. This shift along the axis **118** may correspond to a manipulation of the multi-axis control **106**, such as where the hand **108** applies a force to shift the multi-axis control **106** up from an inferior position (e.g., the default position **702**) to the superior position at which the multi-axis control **106** is depicted in the view **700**.

[0069] This upward manipulation actuates the components of the figure to rotate the eyeball **110** downward. A direction of this rotation is represented by arrow **704**. Here, more of the eyelid **112** is visible through the eye hole **116** than in the default positions depicted in FIG. **6**. Dashed outline **706** represents the default positions of at least some of the components. The actuated positions of the components depicted in the transparent side view **700** may correspond to the down-looking expression **310**.

[0070] In addition, the transparent side view **700** depicts the control rod **406** hinging at the flexible joint **412**. In particular, the transparent side view **700** depicts a portion of the control rod **406**, between the flexible joint **412** and the second pivot point **416**, hinging toward a front of the figure head **102**, e.g., toward the face. In other words, an anterior angle between this portion of the control rod **406** and the portion of the control rod **406** between the flexible joint **412** and the multi-axis control **106** is more acute than in the

default positions depicted in FIG. **6**. This hinging may enable the eyeballs **110** to be rolled downward as depicted.

[0071] FIG. **8** depicts a transparent side view **800** of the figure head showing actuation of some of the components in the cavity based on manipulation of the multi-axis control in an opposing direction.

[0072] In the transparent side view **800** the figure head **102** is also depicted from a left side and is transparent so that the various components discussed in relation to FIG. **6** are visible. In contrast to FIG. **6** though, the components are depicted actuated in the transparent side view **800**. Here, the multi-axis control **106** is depicted shifted downward substantially along the axis **118** from default position **802**. This shift along the axis **118** may correspond to a manipulation of the multi-axis control **106** where the hand **108** applies a force to shift the multi-axis control **106** down from a superior position (e.g., the default position **802**) to the inferior position at which the multi-axis control **106** is depicted in the view **800**.

[0073] This downward manipulation actuates the components of the figure to rotate the eyeball **110** upward. A direction of this rotation is represented by arrow **804**. Here, less (if any) of the eyelid **112** is visible through the eye hole **116** than in the default positions depicted in FIG. **6**. Dashed outline **806** represents the default positions of at least some of the components. The actuated positions of the components depicted in the transparent side view **800** may correspond to the up-looking expression **308**.

[0074] In addition, the transparent side view **800** depicts the control rod **406** hinging at the flexible joint **412** in an opposing direction to the hinging depicted in FIG. **7**. In one or more implementations, a portion of the control rod **406**, between the flexible joint **412** and the second pivot point **416**, may hinge away from a front of the figure head **102** responsive to a manipulation that shifts the multi-axis control downward. In other words, the anterior angle between this portion of the control rod **406** and the portion of the control rod **406** between the flexible joint **412** and the multi-axis control **106** is less acute than in the default positions depicted in FIG. **6** or in the forward-hinged position depicted in FIG. **7**. This hinging may enable the eyeballs **110** to be rolled upward as depicted.

[0075] FIG. **9** depicts a posterior view **900** of the figure head having an opening to a cavity showing transversal rotation of the eyeballs in a first direction based on a rotational manipulation of the multi-axis control.

[0076] The posterior view **900** depicts the figure head **102** from its posterior. In this view **900**, components disposed within the cavity **404** of the figure head **102** are visible through the opening **402** to the cavity **404**. The figure's components depicted in the posterior view **900** include the headstick **104**, the multi-axis control **106**, the control rod **406**, the flexible joint **412**, the yoke **418**, the yoke posts **422**, and the eyeballs **110** disposed on the eyeball posts **424**. The posterior view also depicts respective axes **902**, which extend substantially along a length of the eyeball posts **424**.

[0077] In this view **900**, those components are depicted actuated based on rotation of the multi-axis control **106**. In particular, the multi-axis control **106** is rotated from default position **904** substantially around the axis **118** toward a front of the figure. This rotation may correspond to a manipulation of the multi-axis control **106**, such as where the hand **108** applies a force to rotate the multi-axis control **106** from a posterior position (e.g., the default position **904**) around the axis **118** to the anterior position at which the multi-axis control **106** is depicted in the view **900**.

[0078] This rotation in the transverse plane actuates components of the figure to rotate the eyeballs **110** around the respective axes **902** and causes the eyes to "look" left. The rotation of the eyeballs **110** about the respective axes **902** is represented by arrows **906** and the direction in which the eyes are "looking" is represented by the arrow **908**. Dashed outline **910** represents default positions of at least some of the components. The actuated positions of the components depicted in the posterior view **900** may correspond to the left-looking expression **306**.

[0079] FIG. **10** depicts a posterior view of the figure head having an opening to a cavity showing transversal rotation of the eyeballs in second direction based on a rotational manipulation of the multi-axis control in an opposing direction.

[0080] In the posterior view **1000**, the figure head **102** is also depicted from the posterior so that the various components discussed in relation to FIG. **9** are visible. In contrast to FIG. **9** though, those components are depicted actuated based on an opposing rotation of the multi-axis control **106**. In particular, the multi-axis control **106** is rotated from default position **1002** substantially around the axis **118** toward a posterior of the figure. This rotation may correspond to a manipulation of the multi-axis control **106**, such as where the hand **108** applies a force to rotate the multi-axis control **106** from an anterior position (e.g., the default position **1002**) around the axis **118** to the posterior position at which the multi-axis control **106** is depicted in the view **1000**.

[0081] This rotation in the transverse plane actuates components of the figure to rotate the eyeballs **110** around respective axes **1004** and causes the eyes to "look" right. The rotation of the eyeballs **110** about the respective axes **1004** is represented by arrows **1006** and the direction in which the eyes are "looking" is represented by the arrow **1008**. Dashed outline **1010** represents default positions of at least some of the components. The actuated positions of the components depicted in the posterior view **1000** may correspond to the right-looking expression **304**.

[0082] FIG. **11** depicts a posterior view **1100** of the figure head having an opening to a cavity in which some of the components in the cavity are disposed in default positions.

[0083] The posterior view **1100** depicts the figure head **102** from its posterior. In this view **900**, components disposed within the cavity **404** of the figure head **102** are visible through the opening **402** to the cavity **404**. The figure's components depicted in the posterior view **900** include the headstick **104**, the multi-axis control **106**, the control rod **406**, the flexible joint **412**, the eyebrow control rods **114**, the eyebrow crossbar **428**, the eyebrow control rod saddles **430**, the eyebrow fulcrums **432**, the cords **434**, the lower cord crossbar **436**, and the tensioners **438**. This view **1100** represents a scenario where those components are disposed in default positions, such as where no force is applied to the multi-axis control **106**. By way of example, the disposition of the components in such default positions may correspond to the default expression **302**.

[0084] FIG. **12** depicts a posterior view **1200** of the figure head having an opening to a cavity showing actuation of eyebrows based on manipulation of the multi-axis control.

[0085] In the posterior view **1200**, the figure head **102** is also depicted from the posterior so that various components

discussed in relation to FIG. **11** are visible. In contrast to FIG. **11** though, those components are depicted actuated in the posterior view **1200** based on an upward shift or sliding of the multi-axis control **106**. Here, the multi-axis control **106** is depicted shifted upward substantially along the axis **118** from default position **1202**. This shift along the axis **118** may correspond to a manipulation of the multi-axis control **106**, such as where the hand **108** applies a force to shift the multi-axis control **106** up from an inferior position (e.g., the default position **1202**) to the superior position at which the multi-axis control **106** is depicted in the view **1200**.

[0086] This upward manipulation of the multi-axis control **106** actuates the components of the figure to rotate the eyebrow control rods **114** in the frontal plane. This rotation is represented by arrows **1204**(**1**)-(**4**). Specifically, the arrows **1204**(**1**), **1204**(**2**) represent rotation of the portions of the eyebrow control rods **114** disposed within the figure head **102**, and the arrows **1204**(**3**), **1204**(**4**) represent rotation of the portions of the eyebrow control rods **114** (the anterior ends) disposed outside the figure head **102**. Here, the arrows **1204**(**3**), **1204**(**4**) represent a rotation of the anterior ends of the eyebrow control rods **114** that corresponds to lowering eyebrows **1206**. In one or more implementations, the eyebrows **1206** are attached to the anterior portions of the eyebrow control rods **114** disposed outside the figure head **102**.

[0087] To cause the eyebrow control rods **114** and the eyebrows **1206** to rotate as represented by the arrows **1204**(**1**)-(**4**), the multi-axis control **106** actuates the control rod **406** to shift upward from an inferior position to a superior position. The connection point, integral with the control rod **406** and disposed substantially at the first pivot point **414**, is thus also shifted upward. This increases tension on a first set of the cords **434**(**1**), **434**(**2**) causing them to tighten. Due to passing underneath the lower cord crossbar **436**, the tightening of this first set of the cords **434**(**1**), **434**(**2**) also causes them to pull downward on the medial portions of the eyebrow fulcrums **432**. Responsive to this, the eyebrow fulcrums **432** rotate around respective axes that extend substantially a length of the eyebrow control rods **114** (the portions within the figure head). This rotation is similar to the rotations represented by the arrows **1204**(**1**)-(**4**). During this actuation, a second set of the cords **434**(**3**), **434**(**4**) slackens. The actuated positions of the components depicted in the posterior view **1200** may correspond to the down-looking expression **310**.

[0088] FIG. **13** depicts a posterior view **1300** of the figure head having an opening to a cavity showing actuation of the eyebrows based on manipulation of the multi-axis control in an opposing direction.

[0089] In the posterior view **1300**, the figure head **102** is also depicted from the posterior so that various components discussed in relation to FIG. **11** are visible. In contrast to FIG. **11** though, those components are depicted actuated in the posterior view **1300** based on a downward shift or sliding of the multi-axis control **106**. Here, the multi-axis control **106** is depicted shifted downward substantially along the axis **118** from default position **1302**. This shift along the axis **118** may correspond to a manipulation of the multi-axis control **106**, such as where the hand **108** applies a force to shift the multi-axis control **106** down from a superior position (e.g., the default position **1302**) to the inferior position at which the multi-axis control **106** is depicted in the view **1300**.

[0090] This downward manipulation of the multi-axis control **106** actuates the components of the figure to rotate the eyebrow control rods **114** in the frontal plane, but in an opposing direction as the actuation depicted in FIG. **12**. This opposing rotation is represented by arrows **1304**(**1**)-(**4**). Specifically, the arrows **1304**(**1**), **1304**(**2**) represent rotation of the portions of the eyebrow control rods **114** disposed within the figure head **102**, and the arrows **1304**(**3**), **1304**(**4**) represent rotation of the portions of the eyebrow control rods **114** (the anterior ends) disposed outside the figure head **102**. Here, the arrows **1304**(**3**), **1304**(**4**) represent a rotation of the anterior ends of the eyebrow control rods **114** that corresponds to raising the eyebrows **1206**.

[0091] To cause the eyebrow control rods **114** and the eyebrows **1206** to rotate as represented by the arrows **1304**(**1**)-(**4**), the multi-axis control **106** actuates the control rod **406** to shift downward from a superior position to an inferior position. The connection point, integral with the control rod **406** and disposed substantially at the first pivot point **414**, is thus also shifted downward. This increases tension on the second set of the cords **434**(**3**), **434**(**4**) causing them to tighten. This tightening further causes the second set of cords **434**(**3**), **434**(**4**) to pull downward on the lateral portions of the eyebrow fulcrums **432**. Responsive to this, the eyebrow fulcrums **432** rotate around the respective axes that extend substantially the length of the eyebrow control rods **114** (the portions within the figure head **102**). This rotation is similar to the rotations represented by the arrows **1304**(**1**)-(**4**). During this actuation, the first set of cords **434**(**1**), **434**(**2**) slackens. The actuated positions of the components depicted in the posterior view **1300** may correspond to the up-looking expression **308**.

Conclusion

[0092] Although aspects of figure expression using a multi-axis control have been described in language specific to structural features and/or methods, it is to be understood that the appended claims are not necessarily limited to the specific features or methods described. Rather, the specific features and methods are disclosed as example implementations of figure expression using a multi-axis control. Further, various different examples are described, and it is to be appreciated that each described example can be implemented independently or in connection with one or more other described examples.

What is claimed is:

1. A ventriloquism figure comprising:
a head having eyes; and
a multi-axis control configured to control:
side-to-side movement of the eyes;
up-and-down movement of the eyes; and
roll-around movement of the eyes.

2. The ventriloquism figure as described in claim **1**, wherein the multi-axis control is configured to control the side-to-side movement of the eyes, the up-and-down movement of the eyes, and the roll-around movement of the eyes responsive to application of force by a hand of a person to manipulate the multi-axis control.

3. The ventriloquism figure as described in claim **2**, wherein the multi-axis control is configured to control the side-to-side movement of the eyes, the up-and-down movement of the eyes, and the roll-around movement of the eyes without application of force by a hand of the person to any other controls.

4. The ventriloquism figure as described in claim **2**, further comprising one or more tensioners configured to return the eyes to a default expression responsive to removal of all application of force from the multi-axis control.

5. The ventriloquism figure as described in claim **1**, wherein the multi-axis control is further configured to control blinking of the ventriloquism figure's eyelids.

6. The ventriloquism figure as described in claim **5**, wherein the eyelids are fixed to the eyes.

7. The ventriloquism figure as described in claim **5**, wherein the multi-axis control is configured to lower the eyelids and actuate downward movement of the eyes simultaneously.

8. The ventriloquism figure as described in claim **1**, wherein the multi-axis control is further configured to control raising and lowering of the ventriloquism figure's eyebrows.

9. The ventriloquism figure as described in claim **8**, wherein the multi-axis control is configured to raise the eyebrows and actuate upward movement of the eyes simultaneously.

10. The ventriloquism figure as described in claim **8**, wherein the multi-axis control is configured to lower the eyebrows and actuate downward movement of the eyes simultaneously.

11. The ventriloquism figure as described in claim **1**, wherein the multi-axis control is configured to control all of the side-to-side movement of the eyes, the up-and-down movement of the eyes, the roll-around movement of the eyes, blinking of the ventriloquism figure's eyelids, and raising and lowering of the ventriloquism figure's eyebrows without application of force by a hand of a person to any other controls.

12. An apparatus comprising:

a figure head having eyeballs, eyelids, and eyebrows; and

a multi-axis control integral with the figure head and configured to control the eyeballs, the eyelids, and the eyebrows responsive to manipulation of the multi-axis control by a hand of a person.

13. The apparatus as described in claim **12**, wherein the eyeballs, the eyelids, and the eyebrows are controlled only by the multi-axis control.

14. The apparatus as described in claim **12**, wherein the multi-axis control is configured to control the eyeballs, the eyelids, and the eyebrows without application of force by the hand of the person to any other control.

15. The apparatus as described in claim **12**, further comprising a headstick, wherein:

the figure head is integral with a superior end of the headstick and the headstick is configured to be held at least partially in fingers of the person's hand; and

the multi-axis control is configured to be manipulated by only a thumb of the person's hand while the headstick is held in the fingers of the person's hand.

16. The apparatus as described in claim **12**, wherein the multi-axis control is configured to control the eyeballs to move side-to-side, move up-and-down, and roll around.

17. The apparatus as described in claim **12**, wherein the multi-axis control is configured to control the eyelids to blink.

18. The apparatus as described in claim **12**, wherein the multi-axis control is configured to control the eyebrows to raise and lower.

19. A method comprising:

biasing eyes, eyelids, and eyebrows of a ventriloquism figure's head in default positions; and

controlling, responsive to manipulation by a person's hand of only a multi-axis control, the eyes, eyelids, and eyebrows simultaneously to produce one or more expressions of the ventriloquism figure's face.

20. The method as described in claim **19**, wherein biasing the eyes, eyelids, and eyebrows in the default positions produces a default expression of the ventriloquism figure's face.

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