A seesaw-typed inflatable puppet has an inflatable and seesaw-typed main body, a first envelope, a second envelope, a blower generating air and being connected to the main body and a valve assembly being connected between the first envelope and the second envelope. The air generated by the blower flows into the main body to inflate the main body, selectively flows into the first envelope to deflate the second envelope and flows into the second envelope to deflate the first through the valve assembly. Thus, the first envelope and the second envelope inflate and deflate alternatively. The main body swings back and forth like a seesaw and performs entertaining and novel movements.
SEESAW-TYPED INFLATABLE PUPPET

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention
[0002] The present invention relates to an inflatable puppet, especially to a seesaw-typed inflatable puppet that swings back and forth by inflating and deflating air inside the inflatable puppet.
[0003] 2. Description of the Prior Arts
[0004] A conventional inflatable puppet has an expandable body and a blower. The expandable body is hollow, made of fabric, plastic or any other flexible and airproof materials and has various eye-catching appearances. The blower is connected to and inflates the expandable body to allow the expandable body to become a three-dimensional exhibition and to attract people’s attention.
[0005] However, the conventional inflatable puppet is statically exhibited in a fixed place, remains a uniform shape and has no entertaining expansion or movement after being inflated. Therefore, the statical conventional inflatable puppet is less attractive than an exhibition that moves.
[0006] To overcome the shortcomings, the present invention provides a seesaw-typed inflatable puppet to mitigate or obviate the aforementioned problems.

SUMMARY OF THE INVENTION

[0007] The main objective of the present invention is to provide a seesaw-typed inflatable puppet that has an inflatable and seesaw-typed main body, a first envelope, a second envelope, a blower generating air and being connected to the main body and a valve assembly being connected between the first envelope and the second envelope.
[0008] The air generated by the blower flows into and inflates the main body, selectively flows into the first envelope to deflate the second envelope and flows into the second envelope to deflate the first through the valve assembly. Thus, the first envelope and the second envelope inflate and deflate alternatively. The main body swings back and forth like a seesaw and performs entertaining and novel movements.
[0009] Other objectives, advantages and novel features of the invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIG. 1 is a side view of a seesaw-typed inflatable puppet in accordance with the present invention, shown a blower in phantom lines;
[0011] FIG. 2 is an upper view of the seesaw-typed inflatable puppet in FIG. 1, shown a decorative segment being omitted;
[0012] FIG. 3 is an enlarged upper view of the seesaw-typed inflatable puppet in FIG. 1;
[0013] FIG. 4 is an enlarged operational upper view of the seesaw-typed inflatable puppet in FIG. 1, showing a valve assembly;
[0014] FIG. 5 is an operational side view of the seesaw-typed inflatable puppet in FIG. 1, shown a first envelope being inflated and a second envelope being deflated;
[0015] FIG. 6 is an enlarged operational upper view of the seesaw-typed inflatable puppet in FIG. 1, showing a valve assembly; and
[0016] FIG. 7 is an operational side view of the seesaw-typed inflatable puppet in FIG. 1. Shown a first envelope being deflated and a second envelope being inflated.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0017] With reference to FIG. 1, a seesaw-typed inflatable puppet in accordance with the present invention comprises a main body (1), a first envelope (30), a second envelope (40), a blower (50) and a valve assembly (60).
[0018] With further reference to FIG. 2, the main body (1) is hollow, is inflatable and has a swing segment (10) and a decorative segment (20).
[0019] The swing segment (10) is annular, is seesaw-typed to allow the main body (1) to swing back and forth and has a raised front end, a raised rear end, an inner annular wall, a mounting cavity (100), multiple lengthwise chambers (11), multiple transverse chambers (12), an inlet (13) and an outlet (14).
[0020] The mounting cavity (100) is formed between the raised front and rear ends and is surrounded by the inner annular wall.
[0021] The lengthwise chambers (11) and the transverse chambers (12) are perpendicular and communicate with each other. The lengthwise chambers (11) may comprise a first lengthwise chamber (11) and a second lengthwise chamber (11).
[0022] The inlet (13) is formed through the inner annular wall of the swing segment (10) and may communicate with the first lengthwise chamber (11) of the swing segment (10).
[0023] The outlet (14) is formed through the inner annular wall of the swing segment (10) and may communicate with the second lengthwise chamber (11) of the swing segment (10).
[0024] The decorative segment (20) is integrally formed on and communicates with the swing segment (10) and may be formed as a doll or other eye-catching appearances.
[0025] The first envelope (30) is mounted in the mounting cavity (100), corresponds to and is near the raised front end of the swing segment (10) of the main body (1) and has an opening (31).
[0026] The second envelope (40) is mounted in the mounting cavity (100), corresponds to and is near the raised rear end of the swing segment (10) of the main body (1) and has an opening (41).
[0027] The blower (50) generates airflow, is mounted in the mounting cavity (100), is mounted between the first envelope (30) and the second envelope (40), is connected to the swing segment (10) of the main body (1) to inflate the main body (1) and has an outlet (51). The outlet (51) of the blower (50) is connected to and communicates with the inlet (13) of the swing segment (10) to allow air generated by the blower (50) to flow into the swing segment (10) of the main body (1) and to inflate the swing segment (10) and the decorative segment (20) of the main body (1).
[0028] With further reference to FIGS. 3 and 4, the valve assembly (60) is mounted on the blower (50), is mounted in the mounting cavity (100), is mounted between the first envelope (30) and the second envelope (40) and has a base (61), a switching separator (62), a recessed wheel (63), a guiding device (65) and a driver (64).
[0029] The base (61) has a top, a bottom, a valve chamber (610), an inlet valve (611), an outlet valve (613), a first connecting valve (612) and a second connecting valve (614). The
inlet valve (611) is formed on and communicates with the valve chamber (610), corresponds to and is connected to the outlet (14) of the swing segment (10) and communicates with the swing segment (10) of the main body (1). The outlet valve (613) is formed on and communicates with the valve chamber (610) and is opposite to the inlet valve (611) of the base (61). The first connecting valve (612) is formed on and communicates with the valve chamber (610), is connected to the opening (31) of the first envelope (30), communicates with the first envelope (30) and selectively communicates with the inlet and outlet valves (611, 613). The second connecting valve (614) is formed on and communicates with the valve chamber (610), is connected to the opening (41) of the second envelope (40), communicates with the second envelope (40), is opposite to the first connecting valve (612) of the base (61) and selectively communicates with the inlet and outlet valves (611, 613).

[0030] The switching separator (62) is mounted rotatably in the valve chamber (610), blocks the airflow to allow the first and second connecting valves (612, 614) to selectively communicate with the inlet and outlet valves (611, 613) and has a middle and may have a shaft (621). The shaft (621) is securely mounted through the middle of the switching separator (62), is mounted rotatably in the base (61) and has an inner end and an outer end. The inner end and the outer end of the shaft (621) of the switching separator (62) are selectively and connected rotatably to the top and the bottom of the base (61) of the valve assembly (60). The outer end of the shaft (621) of the switching separator (62) protrudes out of the base (61) of the valve assembly (60).

[0031] The recessed wheel (63) is securely mounted on the switching separator (62), may be securely mounted on the outer end of the shaft (621) of the switching separator (62), has an annular edge and may have four guiding recesses (632) and four guiding tracks (633). The guiding recesses (632) are formed separately in the annular edge of the recessed wheel (63). The guiding tracks (633) are formed separately in the annular edge of the recessed wheel (63) and are formed respectively between the adjacent guiding recesses (632).

[0032] The guiding device (65) is mounted rotatably on the base (61) near the recessed wheel (63), rotates the recessed wheel (63) and the switching separator (62) and may have a rotating rod (651), a cam (652), an extending board (653) and a guiding rod (654). The rotating rod (651) is mounted rotatably on the base (61) of the valve assembly (60) adjacent to the recessed wheel (63). The cam (652) is securely mounted around the rotating rod (651), corresponds to the recessed wheel (63) and has a concave periphery edge and a convex periphery edge. The convex periphery edge selectively abuts one guiding recess (632) of the recessed wheel (63). The extending board (653) is securely mounted around the rotating rod (651), protrudes out of the convex periphery edge of the cam (652) and has a distal end. The guiding rod (654) is mounted securely through the extending board (653) near the distal end of the extending board (653) and is selectively mounted into and moves along one guiding track (633) of the recessed wheel (63).

[0033] The driver (64) is mounted beside the base (61) of the valve assembly (60) and has an axle (641). The axle (641) is extending toward the base (61) of the valve assembly (60), is connected to the guiding device (65) to rotate the guiding device (65) and may be connected to the rotating rod (651) of the guiding device (65) to rotate the rotating rod (651).

[0034] The air generated by the blower (50) inflates the lengthwise chambers (11), the transverse chambers (12) of the swing segment (10) of the main body (1) and the decorative segment (20) of the main body (1). Then, the air further flows into the base (61) of the valve assembly (60).

[0035] With further reference to FIG. 6, the driver (64) rotates the guiding rod (651) of the guiding device (65). The convex periphery edge of the cam (652) of the guiding device (65) are moved along one guiding recess (632) of the recessed wheel (63) until guiding rod (654) of the guiding device (65) is mounted into one guiding track (633) of the recessed wheel (63). Thus, whenever the axle (641) of the driver (64) make a turn, the recessed wheel (63) and the switching separator (62) rotate 90 degrees.

[0036] With reference to FIGS. 1, 4 and 5, the switching separator (62) is rotated to communicate the inlet valve (611) with the first connecting valve (612) and to communicate the outlet valve (613) with the second connecting valve (614). The air in the main body (1) further flows into and inflates the first envelope (30). Therefore, the raised front end of the swing segment (10) is upward and the raised rear end of the swing segment (10) is downward. Consequently, the second envelope (40) is pressed to deflate the air out of the second envelope (40).

[0037] With reference to FIGS. 1, 6 and 7, the switching separator (62) is rotated to communicate the inlet valve (611) with the second connecting valve (614) and to communicate the outlet valve (613) with the first connecting valve (612). The air in the main body (1) flows into and inflates the second envelope (40). Therefore, the raised rear end of the swing segment (10) is upward and the raised front end of the swing segment (10) is downward. Consequently, the first envelope (30) is pressed to deflate the air out of the first envelope (30).

[0038] The seesaw-type inflatable main body as described has the following advantages. With the switching separator (62) rotates, the first envelope (30) and the second envelope (40) inflate and deflate alternatively. The swing segment (10) of the main body (1) swings back and forth like a seesaw and the main body (1) performs entertaining and novel movements.

[0039] Even though numerous characteristics and advantages of the present invention have been set forth in the foregoing description, together with details of the structure and features of the invention, the disclosure is illustrative only. Changes may be made in the details, especially in matters of shape, size, and arrangement of parts within the principles of the invention to the full extent indicated by the broad general meaning of the terms in which the appended claims are expressed.

What is claimed is:
1. An inflatable puppet comprising:
a main body being hollow, being inflatable and having
a swing segment being annular, being seesaw-type and having
a raised front end;
a raised rear end;
an inner annular wall;
am mounting cavity being formed between the raised front and rear ends and being surrounded by the inner annular wall;
an inlet being formed through the inner annular wall of the swing segment; and
an outlet being formed through the inner annular wall of the swing segment; and
a decorative segment being integrally formed on and communicating with the swing segment;
a first envelope being mounted in the mounting cavity, corresponding to and being near the raised front end of the swing segment of the main body and having an opening;
a second envelope being mounted in the mounting cavity, corresponding to and being near the raised rear end of the swing segment of the main body and having an opening;
a blower being mounted in the mounting cavity, being mounted between the first envelope and the second envelope, being connected to the swing segment of the main body and having an outlet being connected to and communicating with the inlet of the swing segment; and
a valve assembly being mounted on the blower, being mounted in the mounting cavity, being mounted between the first envelope and the second envelope and having
a base having
a top;
a bottom;
a valve chamber;
an inlet valve being formed on and communicating with the valve chamber, corresponding to and being connected to the outlet of the swing segment and communicating with the swing segment of the main body;
an outlet valve being formed on and communicating with the valve chamber and being opposite to the inlet valve of the base;
a first connecting valve being formed on and communicating with the valve chamber, being connected to the opening of the first envelope, communicating with the first envelope and selectively communicating with the inlet and outlet valves; and
a second connecting valve being formed on and communicating with the valve chamber, being connected to the opening of the second envelope, communicating with the second envelope, being opposite to the first connecting valve of the base and selectively communicating with the inlet and outlet valves;
a switching separator being mounted rotatably in the valve chamber, allowing the first and second connecting valves selectively communicating with the inlet and outlet valves and having a middle;
a recessed wheel being securely mounted on the switching separator and having an annular edge;
a guiding device being mounted rotatably on the base near the recessed wheel and rotating the recessed wheel and the switching separator; and
a driver being mounted beside the base of the valve assembly and having an axle being extending toward the base of the valve assembly and being connected to the guiding device.
2. The inflatable puppet as claimed in claim 1, wherein the swing segment of the main body further has multiple lengthwise chambers comprising
a first lengthwise chamber; and
a second lengthwise chamber; and
multiple transverse chambers being perpendicular to and communicating with the lengthwise chambers;
the inlet of the swing segment communicates with the first lengthwise chamber of the swing segment; and
the outlet of the swing segment communicates with the second lengthwise chamber of the swing segment.
3. The inflatable puppet as claimed in claim 1, wherein the decorative segment of the main body is a doll.
4. The inflatable puppet as claimed in claim 2, wherein the decorative segment of the main body is a doll.
5. The inflatable puppet as claimed in claim 3, wherein the switching separator further has a shaft being securely mounted through the middle of the switching separator, being mounted rotatably in the base and having an inner end being connected rotatably to the bottom of the base of the valve assembly; and
an outer end being connected rotatably to the top of the base of the valve assembly and protruding out of the base of the valve assembly; and
the recessed wheel is securely mounted on the outer end of the shaft of the switching separator and has four guiding recesses being formed separately in the annular edge of the recessed wheel; and
four guiding tracks being formed separately in the annular edge of the recessed wheel and being formed respectively between the adjacent guiding recesses.
6. The inflatable puppet as claimed in claim 4, wherein the switching separator further has a shaft being securely mounted through the middle of the switching separator, being mounted rotatably in the base and having an inner end being connected rotatably to the bottom of the base of the valve assembly; and
an outer end being connected rotatably to the top of the base of the valve assembly and protruding out of the base of the valve assembly; and
the recessed wheel is securely mounted on the outer end of the shaft of the switching separator and has four guiding recesses being formed separately in the annular edge of the recessed wheel; and
four guiding tracks being formed separately in the annular edge of the recessed wheel and being formed respectively between the adjacent guiding recesses.
7. The inflatable puppet as claimed in claim 5, wherein the guiding device of the valve assembly further has a rotating rod being mounted rotatably on the base of the valve assembly adjacent to the recessed wheel;
a cam being securely mounted around the rotating rod, corresponding to the recessed wheel and having a concave periphery edge; and
a convex periphery edge selectively abutting one guiding recess of the recessed wheel;
an extending board being securely mounted around the rotating rod, protruding out of the concave periphery edge of the cam and having a distal end; and
a guiding rod being mounted through the extending board near the distal end of the extending board and being selectively mounted into and moving along one guiding track of the recessed wheel; and
the driver of the valve assembly is connected to the rotating rod of the guiding device.
8. The inflatable puppet as claimed in claim 6, wherein the guiding device of the valve assembly further has a rotating rod being mounted rotatably on the base of the valve assembly adjacent to the recessed wheel;
a cam being securely mounted around the rotating rod, corresponding to the recessed wheel and having a concave periphery edge; and a convex periphery edge selectively abutting one guiding recess of the recessed wheel; an extending board being securely mounted around the rotating rod, protruding out of the concave periphery edge of the cam and having a distal end; and a guiding rod being mounted through the extending board near the distal end of the extending board and being selectively mounted into and moving along one guiding track of the recessed wheel; and the driver of the valve assembly is connected to the rotating rod of the guiding device.