

MULTIFUNCTIONAL SPA MACHINE

BACKGROUND

1. Field of the Invention

The present invention relates to the field of physiotherapy equipment, and particularly to a multifunctional spa machine.

2. Description of the Prior Arts

With the improvement of living standards, people pay more attention to health issues, various pieces of physiotherapy equipment have emerged. A spa machine is one of the physiotherapy equipment. The spa machine is popular among the public because of its convenience, practicality, and low price. The commonly used spa machine is connected to an air tube. By placing the air tube in a footbath bucket or a tub, or by connecting a spa mat through the air tube and placing the spa mat in the tub, bubbles can be generated in the tub or the footbath bucket, thereby enhancing the user experience during use. However, the existing spa machines are generally large in size and heavy in weight, and are inconvenient to carry and store.

To overcome the shortcomings, the present invention provides a multifunctional spa machine to mitigate or obviate the aforementioned problems.

SUMMARY

The main objective of the present invention is to provide a multifunctional spa machine. By setting the outer structure of the casing into a cylindrical shape, it is convenient for the user to hold the multifunctional spa machine, thereby making it convenient for the user to carry and store the multifunctional spa machine.

The multifunctional spa machine comprises a casing, a fan, an air outlet pipe, and multiple air inlets.

The casing is cylindrical. An air supply hole is formed on a bottom of the casing, and an enclosed space is formed in the casing. The fan is mounted in the casing. The fan comprises a wind inlet and a wind outlet, and the wind inlet is mounted close to a top of the casing. The air outlet pipe is mounted in the casing and connects the air supply hole and the wind outlet of the fan. The air inlets are formed on the casing and communicate with the enclosed space of the casing.

The overall structure of the casing is cylindrical, such that the user can hold the multifunctional spa machine conveniently for carrying and storage. The fan in the casing can generate bubbles to a footbath bucket or a tub to enhance the user experience.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a front view of a multifunctional spa machine in accordance with the present invention;

Fig. 2 is a sectional view of the multifunctional spa machine in Fig. 1;

Fig. 3 is a rear view of the spa machine in Fig. 1; and

Fig. 4 is an operational front view of the spa machine in Fig. 1, with a footbath bucket.

DETAILED DESCRIPTION

With reference to Fig. 1 to Fig. 4, a multifunctional spa machine in accordance with the present invention comprises a casing 1, a fan 2, an air outlet pipe 4, and multiple air inlets 6. The casing 1 is cylindrical. An air supply hole is formed on a bottom of the casing 1, and an enclosed space is formed in the casing 1. The fan 2 is mounted in the casing 1. The fan 2 comprises a wind inlet and a wind outlet, and the wind inlet is mounted close to a top of the casing 1. The air outlet pipe 4 is mounted in the casing 1 and connects the air supply hole and the wind outlet of the fan 2. The air inlets 6 are formed on the casing 1 and communicate with the enclosed space of the casing 1.

In this embodiment, a hose is installed on the multifunctional spa machine. An end of the hose is mounted in a footbath bucket 7 or a tub, and another end of the hose is plugged in the air supply hole of the casing 1. A part of the hose extends into the air outlet pipe 4. When the fan 2 is turned on, air is extracted through the wind inlet of the fan 2 from the air inlets 6 of the casing 1, and then air flows through the wind outlet to the air outlet pipe 4, such that air can flow into the footbath bucket 7 and generate bubbles to enhance the user experience.

Furthermore, cross-sectional dimensions of the casing 1 are adapted to cross-sectional dimensions of a human palm, making it convenient for the user to hold the multifunctional spa machine.

Furthermore, an air duct is formed in the casing 1 and connects the air inlet 6 and the wind inlet of the fan 2. A part of the air duct extends to a side of the fan 2. When the fan 2 is turned on, air flows along with the extraction of the fan 2. When the air flows, the air flows through the side of the fan 2 and takes away some of the heat of the fan 2, thus ensuring the service life of fan 2. A support unit is mounted at the wind inlet of the fan 2. A noise reduction port is formed on the support unit and corresponds in location to the wind inlet. The noise reduction port communicates with the wind inlet of the fan 2 to reduce the noise generated by the fan 2 when in use. A motor of the fan 2 compresses the air in the air duct and then discharges the air through the air outlet pipe 4.

Furthermore, a graphene assembly is mounted in the fan 2. The air sucked into the fan 2 can pass through the graphene assembly and then flow to the air outlet pipe 4 for discharge.

Furthermore, the casing 1 surrounds the fan 2 to reduce the noise generated when the fan 2 is activated.

Furthermore, an ozone generator 5 is mounted in the casing 1 and close to the air inlet 6. The ozone generator 5 can add ozone to the air drawn in by the fan 2, such that it has certain sterilization and deodorization functions during hydrotherapy.

Furthermore, a power port is mounted on a side part of the casing 1, and the power port is electrically connected to the ozone generator 5 and the fan 2.

Furthermore, a controller 3 is fixedly installed on the top of the casing 1, and the controller 3 is electrically connected to and controls the ozone generator 5 and the fan 2. Preferably, the controller 3 electrically connects to the fan 2 and the ozone generator 5 through a wire.

Furthermore, the casing 1 is composed of two casing units jointed to each other. Furthermore, the two casing units are fixed to each other through at least one bolt.

Furthermore, an inner diameter of a part of the air outlet pipe that is close to the air supply hole is greater than an inner diameter of a part of the air outlet pipe that is away from the air supply hole. Preferably, an inner concave section is formed on a part of the air outlet pipe 4 and is concave toward the inner side of the air outlet pipe 4. When the hose is plugged in the air outlet pipe 4, the hose is concave inwards as the inner diameter of the air outlet pipe 4 changes, such that the inner concave section clamps the hose to fix the hose.

Furthermore, the air inlets 6 are formed on a lower part of the casing 1.

Furthermore, an installing bracket is mounted in the casing 1, and the fan 2 is installed on the installing bracket.

Furthermore, a top surface of the casing 1 is an inclined surface.

The following is a process of using the multifunctional spa machine in accordance with the present invention. In the first embodiment, a hose is plugged into the air supply hole of the casing 1. One end of the hose is mounted in the footbath bucket 7. A part of the hose extends into the air outlet pipe 4, and the hose is clamped in the portion of the air

outlet pipe 4 away from the air supply hole. When the fan 2 is turned on, air is extracted through the wind inlet of the fan 2 from the air inlets 6 of the casing 1, and then air flows through the wind outlet to the air outlet pipe 4. The ozone generator 5 close to the air inlet 6 generates ozone. The fan 2 extracts the air and the ozone such that the air and the ozone enter the footbath bucket 7 and generate bubbles to enhance the user experience.

In the second embodiment, the air supply hole of the casing 1 is connected to a spa mat. The spa mat comprises an air tube connecting to the casing 1. A part of the air tube extends into the air outlet pipe 4. The air tube is clamped in the portion of the air outlet pipe 4 away from the air supply hole, and the spa mat is placed in a tub. When the fan 2 is turned on, air is extracted through the wind inlet of the fan 2 from the air inlets 6 of the casing 1, and then air flows through the wind outlet to the air outlet pipe 4. The ozone generator 5 close to the air inlet 6 generates ozone. The fan 2 extracts the air and the ozone such that the air and the ozone enter the tub and generate bubbles to enhance the user experience.

WHAT IS CLAIMED IS:

1. A multifunctional spa machine comprising:

a casing being cylindrical; an air supply hole formed on a bottom of the casing,
and an enclosed space formed in the casing;

5 a fan mounted in the casing; the fan comprising a wind inlet and a wind outlet, and
the wind inlet located close to a top of the casing;

an air outlet pipe mounted in the casing and connecting the air supply hole and the
wind outlet of the fan; and

multiple air inlets formed on the casing and communicating with the enclosed
10 space of the casing.

2. The multifunctional spa machine as claimed in claim 1, wherein an ozone
generator is mounted in the casing and near the air inlets.

3. The multifunctional spa machine as claimed in claim 2, wherein a power port is
mounted on a side part of the casing, and the power port is electrically connected to the
15 ozone generator and the fan through a wire.

4. The multifunctional spa machine as claimed in claim 2, wherein a controller is
fixedly installed on the top of the casing, and the controller is electrically connected to and
controls the ozone generator and the fan.

5. The multifunctional spa machine as claimed in claim 1, wherein the casing is
20 composed of two casing units jointed to each other.

6. The multifunctional spa machine as claimed in claim 5, wherein the two casing
units are fixed to each other through at least one bolt.

7. The multifunctional spa machine as claimed in claim 1, wherein an inner
diameter of a part of the air outlet pipe that is close to the air supply hole is greater than an
25 inner diameter of another part of the air outlet pipe that is away from the air supply hole.

8. The multifunctional spa machine as claimed in claim 1, wherein the air inlets are formed on a lower part of the casing.

9. The multifunctional spa machine as claimed in claim 1, wherein an installing bracket is mounted in the casing, and the fan is installed on the installing bracket.

5 10. The multifunctional spa machine as claimed in claim 1, wherein a top surface of the casing is an inclined surface.