CLAIMS

What is claimed is:

1. A handheld high-pressure cleaning machine, wherein the high-pressure cleaning machine is powered by using a direct current, and can be connected to an external water source by using a water pipe; and the high-pressure cleaning machine comprises:

a housing, wherein a motor, a transmission mechanism connected to the motor, and a pump driven by the transmission mechanism are provided in the housing;

a handle used for gripping; and

a nozzle, wherein water from the external water source is sprayed out through the nozzle;

the pump unit further comprises a plunger disposed in the pump and an eccentric mechanism connected to the plunger, the eccentric mechanism drives the plunger to perform reciprocating motion.

2. The high-pressure cleaning machine according to claim 1, wherein the pump unit further comprises a pump body and an upper pump cover and a lower pump cover that are detachably installed on the pump body .

3. The high-pressure cleaning machine according to claim 1, wherein the eccentric mechanism comprises a rotating shaft rotating around a central axis, and an eccentric shaft eccentrically connected to the rotating shaft, and the eccentric shaft is connected to the plunger, so that the plunger performs eccentric reciprocating motion relative to the center of the rotating shaft.

4. The high-pressure cleaning machine according to claim 3, wherein the center of the plunger is provided with a mounting portion connected to the eccentric shaft, and a mounting bearing is disposed between the mounting portion and the eccentric shaft.

5. The high-pressure cleaning machine according to claim 1, wherein the high-pressure cleaning machine has a total weight less than or equal to 3 kilograms.

6. The high-pressure cleaning machine according to claim 1, wherein the high-pressure cleaning machine has a total weight less than or equal to 2 kilograms.

7. The high-pressure cleaning machine according to claim 1, wherein the center of gravity of the high-pressure cleaning machine is located in a front-to-rear direction of the high-pressure cleaning machine and is within a range from 8 centimeters behind a rear endpoint of the handle to 8 centimeters in front of a front endpoint of the handle.

8. The high-pressure cleaning machine according to claim 7, wherein the center of gravity of the high-pressure cleaning machine is located in the front to rear direction of the high-pressure cleaning machine and is within a range from the rear endpoint of the handle to 5 centimeters in front of the front endpoint of the handle.

9. The high-pressure cleaning machine according to claim 7, wherein the motor, the transmission mechanism, and the pump form a functional component, and the functional component is located at one end of the handle; and the high-pressure cleaning machine further comprises a battery pack, and the battery pack is located at the other end of the handle.

10. The high-pressure cleaning machine according to claim 7, wherein the motor, the transmission mechanism, and the pump form a functional component, and the center of gravity of the functional component is located in front of the front endpoint of the handle; and the high-pressure cleaning machine further comprises a battery pack, and the center of gravity of the battery pack is located behind the front endpoint of the handle.

11. The high-pressure cleaning machine according to claim 1, wherein at least one part of the functional component and the battery pack extends into the handle.

12. The high-pressure cleaning machine according to claim 1, wherein the motor,

the transmission mechanism, and the pump form a functional component, and the functional component has a weight less than or equal to 1000 grams; and the high-pressure cleaning machine further comprises a battery pack, and the battery pack has a weight less than or equal to 800 grams.

13. The high-pressure cleaning machine according to claim 1, wherein the high-pressure cleaning machine further comprises a battery pack, a rated voltage of the battery pack is from 18 V to 42 V, and a capacity is from 1.5 Ah to 3 Ah.

14. The high-pressure cleaning machine according to claim 1, wherein the high-pressure cleaning machine has a water inlet port configured to connect to the water pipe, wherein the water inlet port is within a range of 5 centimeters in front of or behind the center of gravity of the high-pressure cleaning machine.

15. The high-pressure cleaning machine according to claim 1, having a water inlet port configured to connect to the water pipe, wherein the water inlet port is within a range from 5 centimeters in front of a front endpoint of the handle to 5 centimeters behind a rear endpoint of the handle.

16. The high-pressure cleaning machine according to claim 1, wherein the high-pressure cleaning machine has a total length less than 500 millimeters, and has a height less than or equal to 250 millimeters.

17. The high-pressure cleaning machine according to claim 1, wherein the transmission mechanism comprises a reduction structure, a no-load speed of the motor is greater than or equal to 10000 rpm, and an output speed of the reduction structure is less than or equal to 3000 rpm.

18. The high-pressure cleaning machine according to claim 17, wherein the no-load speed of the motor is greater than or equal to 15000 rpm, and the output speed of the reduction structure is less than or equal to 2500 rpm.

19. The high-pressure cleaning machine according to claim 17, wherein the reduction structure is a planetary gear structure.

20. The high-pressure cleaning machine according to claim 17, wherein a reduction ratio of the reduction structure is from 12: 1 to 3: 1 or from 10: 1 to 4: 1.