What is claimed is:

1. A portable vacuum cleaner, comprising: a housing (1) and a filter assembly (3) provided in the housing (1), the housing (1) comprising:

a dust collecting cylinder (11), the dust collecting cylinder (11) being hollow inside, and the dust collecting cylinder (11) being opened to form an air inlet port (111) and a mating port (112) at two ends of the dust collecting cylinder (11), the mating port (112) being provided with a dust scraping structure;

a dust blocking cover (12), the dust blocking cover (12) being rotatably connected to the air inlet port (111) of the dust collecting cylinder (11), so as to open and close the air inlet port (111); and

a main body (15), the main body (15) being hollow inside and detachably connected to the mating port (112) of the dust collecting cylinder (11);

wherein a two-way locking structure is provided between the dust blocking cover (12) and the main body (15), the two-way locking structure is adapted to lock or unlock the dust blocking cover (12) and the main body (15) simultaneously with the dust collecting cylinder (11), so that when the two-way locking structure is in a locked state, the dust blocking cover (12) cannot open the air inlet port (111), while the dust collecting cylinder (11) and the main body (15) cannot be separated.

2. The portable vacuum cleaner according to claim 1, wherein the two-way locking structure comprises:

a locking guide groove (113), the locking guide groove (113) being formed on an outer side wall of the dust collecting cylinder (11) and extending along an axial direction of the dust collecting cylinder (11); and

two sets of latches (115) symmetrically arranged in the locking guide groove (113);

wherein each of the latches (115) is rotatable relative to the locking guide groove (113) to switch between an unlocked state and the locked state; each of the latches (115) comprises a latch body (1151) and a latch buckle portion (1154); the latch buckle portion (1154) is located outside the locking guide groove (113); when each of the latches (115) is in the locked state, the latch buckle portion (1154) is buckled with the dust blocking cover (12) or the main body (15) to prevent each of the latches (115) from being locked; the dust blocking cover (12) opens the air inlet port (111) or prevents the dust collecting cylinder (11) from being separated from the main body (15).

3. The portable vacuum cleaner according to claim 2, wherein a reset component (1153) is elastically connected to each set of the latches (115); the reset component (1153) is arranged in the locking guide groove (113) and acts on each of the latches (115); the reset component (1153) is elastically deformable; the reset component (1153) is adapted to rotate each of the latches

(115) in a locking direction to reset from the unlocked state to the locked state.

4. The portable vacuum cleaner according to claim 3, wherein two sets of latch bases (1131) corresponding to the latches (115) are provided in the locking guide groove (113); a rotating shaft (1152) is formed adjacent to a middle section of the latch body (1151); the latch body (1151) is rotatably connected with the latch bases (1131) through the rotating shaft (1152).

5. The portable vacuum cleaner according to claim 3, wherein the two-way locking structure comprises an unlocking assembly; the unlocking assembly acts on the latch body (1151) to rotate the latches (115) in an unlocking direction to switch from the locked state to the unlocked state; and the unlocking direction is opposite to the locking direction.

6. The portable vacuum cleaner according to claim 5, wherein the unlocking assembly comprises:

a protective cover (13), the protective cover (13) being covered on the locking guide groove (113) to cover the latch body (1151); and

an unlocking block (131), the unlocking block (131) being slidably embedded in the protective cover (13);

wherein the unlocking block (131) acts on the latch body (1151) to make each of the latches (115) rotate along the unlocking direction to switch from the locked state to the unlocked state.

7. The portable vacuum cleaner according to claim 1, wherein the dust scraping structure comprises a dust scraping cylinder (14) inscribed with the mating port (112); the filter assembly (3) comprises an air guide pipe (31), a coarse filter (32) and a fixing cylinder (33) which are connected in sequence along a flow direction of an airflow;

wherein the dust blocking cover (12) is provided with an air extraction port (123) for air extraction; the air guide pipe (31) and the coarse filter (32) are arranged in the dust collecting cylinder (11), and are arranged at intervals from an inner wall of the dust collecting cylinder (11); the air guide pipe (31) is sealedly connected to the air extraction port (123); the fixing cylinder (33) protrudes beyond the mating port (112) and extends into the dust scraping cylinder (14); an outer side wall of the fixing cylinder (33) is abutted with an inner side wall of the dust scraping cylinder (14).

8. The portable vacuum cleaner according to claim 7, wherein a dust scraping ring (141) is fixed on a joint of the dust scraping cylinder (14) and the dust collecting cylinder (11); the dust scraping ring (141) is combined with the dust scraping cylinder (14) at an end of the dust scraping cylinder (14), and extends from an outer circumference of the dust scraping cylinder (14) toward an inside of the dust collecting cylinder (11) in a tapered manner, so that a diameter of the dust scraping ring (141) is gradually reduced in an extending direction of the dust

scraping ring (141).

9. The portable vacuum cleaner according to claim 7, wherein the dust scraping ring (141) shrinks at an end of the dust scraping ring (141) to form an annular and unclosed dust scraping port (1411); the dust scraping ring (141) is slidably sleeved on the coarse filter (32) through the dust scraping port (1411);

wherein the dust scraping ring (141) maintains elastic contact with an outer side wall of the coarse filter (32) at the dust scraping port (1411).

10. The portable vacuum cleaner according to claim 7, wherein a fine filter chamber (151) and a vacuum generating chamber (152) are provided in the main body (15) in sequence along the flow direction of the airflow; the dust scraping cylinder (14) selectively enters and exits the fine filter chamber (151); and a vacuum generator (21) is arranged in the vacuum generating chamber (152).