DESCRIPTION

SUCTION TOOL AND STICK TYPE CLEANER WITH THE SAME

TECHNICAL FIELD

The present invention relates to a stick-shaped cleaner that can be stowed upright.

BACKGROUND ART

A stick-shaped cleaner is generally of vertically long shape. As such, the stick-shaped cleaner can be stowed upright in a relatively tight space formed in a living space such as a living room (refer to, for example, PTL 1).

In other words, ease of stowing is an essential element of the stick-shaped cleaner. It is thus preferable that the stick-shaped cleaner be of structure that can be stowed in a tighter space.

Citation List

Patent Literature

PTL 1: Unexamined Japanese Patent Publication No. 2010-125193

SUMMARY

According to an aspect, there is provided a suction tool unit which is connected to a main body of a stick-shaped cleaner comprising: a suction tool including a suction hole; a coupling pipe that connects the suction tool to the main body; a rotational structure that allows the suction tool to rotate relative to the main body; a lock mechanism that locks the rotation of the suction tool relative to the main body; wherein the rotational structure is configured to allow the suction tool to rotate relative to the main body such that a

longitudinal direction of the suction tool is along lengthwise of the main body; and the lock mechanism locks the rotation of the suction tool relative to the main body in a state where the longitudinal direction of the suction tool is along lengthwise of the main body.

In an embodiment, a stick-shaped cleaner of the present disclosure includes at least a main body, a suction tool connected to the main body, a rotational structure that allows the suction tool to rotate relative to the main body such that the suction tool is lengthwise along the main body, and a lock mechanism that locks the rotation of the suction tool relative to the main body in a position with the suction tool being lengthwise along the main body.

Thus, the stick-shaped cleaner provided can easily be stowed in a tight

CLAIMS

1. A suction tool unit which is connected to a main body of a stick-shaped cleaner, comprising:

a suction tool including a suction hole;

a coupling pipe that connects the suction tool to the main body;

a rotational structure that allows the suction tool to rotate relative to the main body;

a lock mechanism that locks the rotation of the suction tool relative to the main body;

wherein the rotational structure is configured to allow the suction tool to rotate relative to the main body such that a longitudinal direction of the suction tool is along lengthwise of the main body; and

the lock mechanism locks the rotation of the suction tool relative to the main body in a state where the longitudinal direction of the suction tool is along lengthwise of the main body.

2. The suction tool unit according to claim 1, wherein the coupling pipe includes a first connecting pipe connected to the suction tool so as to rotate relative to the suction tool, and a second connection pipe connected to the first connection pipe so as to rotate relative to the first connection pipe and connected to the main body; and

the rotational structure includes a first rotational structure for relatively rotating the suction tool and the first connection pipe and a second rotational structure for relatively rotating the first connection pipe and the second connection pipe, so as to allow the suction tool to rotate relative to the body such that the longitudinal direction of the suction tool is along lengthwise of the

main body.

3. The suction tool unit according to claim 2, wherein the lock mechanism is configured to lock relative rotation between the first connection pipe and the second connection pipe by using partial contact between the first connection pipe and the second connection pipe caused by relative rotation of the first connection pipe and the second connection pipe

4. The suction tool unit according to claim 2 or 3, further comprising a rotation control part that controls rotation of the suction tool relative to the first coupling pipe, wherein the rotation control part applies force to the suction tool to bring a rotational position of the suction tool closer to a rotational position in a first state where the longitudinal direction of the suction tool is lengthwise along a second axis which parallels widthwise of the main body, or to bring a rotational position of the suction tool closer to a rotational position in a second state where the longitudinal direction of the suction tool is lengthwise orthogonal to the second axis.

5. The suction tool unit according to any one of claims 1 to 4, a height of the suction tool is equal to or less than a maximum width of the main body.

6. A stick-shaped cleaner comprising the suction tool unit according to any one of claims 1 to 5.