detract from a user changing the mode of use of the appliance a number of times during the cleaning of a room.

SUMMARY ~~OF THE INVENTION~~

In a first aspect, the present ~~invention~~disclosure provides an attachment for a vacuum cleaning appliance, the attachment comprising:

a first part comprising a crevice nozzle, a brush section which is moveable relative to the crevice nozzle between a retracted position and a deployed position, and a first connector for releasably connecting the first part to a body of the appliance; and

a second part comprising a suction inlet and a second connector for releasably connecting the second part to the first part, and wherein the second part is arranged to be push-fitted over the first part so that the crevice nozzle and the brush section are stored within the second part when the second part is connected to the first part.

The attachment may be in the form of a wand assembly, in which the second part comprises a wand having a suction inlet which is connectable to an auxiliary suction tool, such as a floor tool, a dusting brush or a mattress cleaning tool.

The present ~~invention~~disclosure may thus provide a two part attachment which enables a vacuum cleaning appliance to be used in different cleaning modes depending on which parts of the attachment are connected to a main body of the appliance. When the first part only is connected to the main body, the appliance can be used in a “handheld mode” of operation for cleaning surfaces raised from a floor surface, such as the surfaces of furniture or a car. When in this mode of operation, moving the brush section between its retracted position and its deployed position can enable the user to rapidly change between a “crevice mode”, in which the crevice nozzle can inserted between gaps in furniture and the like during cleaning, and a “brush mode”, in which bristles of the brush section can agitate dust and debris from exposed work surfaces to become entrained in the airflow entering the crevice nozzle, respectively without having to replace the first part with a different suction tool. When the second part of the attachment is also connected to the body of the appliance, the appliance can be used in a

preferably in a linear direction, between its retracted position and its deployed position. The crevice nozzle preferably comprises a front section, a suction inlet located at a front end of the front section, and a rear section. The first connector is preferably located on or adjacent the rear section of the crevice nozzle. The brush section preferably comprises a plurality of bristles, which are preferably arranged at least partially about the crevice nozzle. The bristles are preferably arranged in a plurality of bristle tufts, although the bristles may be arranged in a continuous array or in a discontinuous array. The bristles are preferably mounted on a brush collar which surrounds the crevice nozzle, and which is moveable relative to the crevice nozzle. When the brush section is in its deployed position, at least the free ends, or tips, of the bristles preferably protrude forwardly beyond the front end of the crevice nozzle.

The brush section preferably comprises a bristle sleeve which extends about the bristles. The bristle sleeve has a free end, and is arranged such that the free ends of the bristles protrude forwardly beyond the free end of the bristle sleeve. Preferably, no more than 20% of the length of the bristles, more preferably no more than 10% of the length of the bristles, protrudes beyond the free end of the bristle sleeve. The provision of the bristle sleeve reduces the risk of the bristles splaying as the brush section is inserted into the second part during connection of the second part to the first part. The bristle sleeve is preferably formed from a resiliently deformable material, preferably from a polyurethane plastic such as TPU, or silicone. Optionally, a second bristle sleeve may be provided around the aforementioned bristle sleeve. Each bristle sleeve may be formed from the same material, such as TPU. Alternatively, one of the bristle sleeves, for example, the second bristle sleeve, may be formed from stiffer material than the other bristle sleeve. Apertures may be formed in the bristle sleeve(s). These apertures can provide air bleeds for permitting air to enter the crevice nozzle from between the bristle tufts.

The first part preferably comprises means for retaining the brush section in its deployed position. In a preferred ~~embodiment~~example, the retaining means comprises a retention catch, preferably in the form of a finger, which engages a recess formed in the crevice nozzle

to retain the brush section in its deployed position. The brush section preferably comprises means for urging the retention catch to engage with the recess when the brush section is in its deployed position. The urging means is preferably provided by a resilient element, such as a spring. To release the brush section from its deployed position, the user actuates the retention catch to disengage it from the recess, against the biasing force of the spring. The user may then simultaneously move the brush section away from its deployed position. The retention catch is preferably shaped so as to protrude outwardly from the outer surface of the brush section when the brush section is retained in its deployed position. In this case, the user may press inwardly the protruding portion of the retention catch to disengage the retention catch from the recess.

When the brush section is in its retracted position, the brush section is preferably positioned around or adjacent the rear section of the crevice nozzle to expose the front section of the crevice nozzle for insertion into gaps between items of furniture.

The second part of the attachment is preferably arranged to store the crevice nozzle and the brush section of the first part with the brush section disposed in its retracted position. In a preferred ~~embodiment~~example, the second part comprises a neck located at one end of the second part, with the suction inlet being located at the other end of the second part. The neck is preferably arranged to receive at least the brush section of the first part, more preferably both the crevice nozzle and the brush section of the first part. The neck preferably comprises a relatively wide internal section for receiving the brush section, and a relatively narrow internal section, located upstream from the relatively wide internal section, for receiving the front section of the crevice nozzle. The neck preferably comprises the second connector for releasably connecting the second part to the first part.

The second part, preferably the neck of the second part, is preferably arranged to engage the brush section to move it towards its deployed position as the second part is pulled from the first part to detach the second part from the first part. The neck is preferably

shaped to form an interference fit with the brush section when the brush section is stored within the second part. As the second part is pulled from the first part, the mechanical interaction between the brush section and the neck cause the brush section to move with the neck, so effecting movement of the brush section away from its retracted position.

The first part preferably comprises means for inhibiting movement of the brush section beyond its deployed position. In a preferred ~~embodiment~~example, the brush section comprises a pawl which is biased towards the external surface of the crevice nozzle, and which enters a channel or groove formed in the crevice nozzle as the brush section moves towards its deployed position. When the brush section has moved to its deployed position, the pawl is located at the end of the channel, which inhibits further movement of the brush section beyond the deployed position. Increasing the force with which the second part is pulled away from the first part overcomes the mechanical interaction between the neck and the brush section to enable the second part to be fully released from the first part.

The neck is preferably shaped to engage the retention catch when the brush section is stored within the neck. The engagement between the neck and the retention catch urges the retention catch inwards to disengage it from the recess, and so permit relative movement between the brush section and the crevice nozzle whilst retaining the brush section within the neck. As the user pulls the second part from the first part, the neck releases the retention catch, enabling it to move under the action of the biasing force of the spring to engage the recess and so retain the brush section in its deployed position.

In the event that the second part is reconnected to the first part whilst the brush section is retained in its deployed position, the neck of the second part engages the retention catch as the second part is pushed over the first part to locate the brush section within the relatively wide portion of the neck. This engagement releases the brush section from its deployed position. The interference fit so generated between the brush section and the neck retains the brush section in the relatively wide portion of the neck. As the

mating surface of the crevice nozzle. The rails may engage the seal carriage directly, or via a moveable wedge member.

The attachment has been described in the form of a wand assembly in which the second part of the attachment comprises a wand. The wand extends between the neck and a lower end section which is connectable to a floor tool or other auxiliary suction tool. For example, the lower end section may be connected to a soft dusting brush to enable the appliance to be used to clean curtain rails or high shelves.

As an alternative, the wand may be replaced by an auxiliary suction tool, such as a stubborn dirt brush, a dusting brush, or an articulated cleaning brush, having a suction inlet for receiving an airflow. This can enable the attachment to take the alternative form of a two part tool for a vacuum cleaning appliance, in which a first part of the tool comprises a crevice nozzle and a brush section, and the second part of the tool comprises an auxiliary suction tool and is arranged to house the crevice nozzle and the brush section of the first part when the auxiliary suction tool is connected to the main body.

As mentioned above, the attachment is preferably in the form of a wand assembly. In a second ~~aspect~~ example the present ~~invention~~disclosure provides a wand assembly comprising:

a first part comprising a crevice nozzle, a brush section which is moveable along the crevice nozzle between a retracted position and a deployed position, and a first connector for connecting the first part to a body of a vacuum cleaning appliance; and

a second part comprising a wand and a second connector for connecting the second part to the first part, and wherein the second part is arranged to be push-fitted over the first part so that the crevice nozzle and the brush section are stored within the second part when the second part is connected to the first part.

In a second aspect, the present disclosure refers to a wand assembly for a vacuum cleaning appliance, the attachment comprising: a first part comprising a crevice nozzle, a brush section which is moveable relative to the crevice nozzle between a retracted position and a deployed position, and a first connector for releasably connecting the first part to a body of the appliance; and a second part comprising a wand and a second connector for releasably connecting the second part to the body of the appliance, and wherein the second part is arranged to be push-fitted over the first part so that the crevice nozzle and the brush section are stored within the second part when the second part is connected to the body of the appliance.

As an alternative to connecting the second part directly to the first part, the second connector may connect the second part directly to the body of the appliance when it is

pushed over the first part. In a third exampleaspect, the present inventiondisclosure provides a vacuum cleaning appliance comprising:

a body comprising a suction source; and

an attachment releasably connected to the body, the attachment comprising:

a first part comprising a crevice nozzle, a brush section which is moveable relative to the crevice nozzle between a retracted position and a deployed position, and a first connector for releasably connecting the first part to a body of the appliance; and

a second part comprising a suction inlet and a second connector for releasably connecting the second part to the body of the appliance, and wherein the second part is arranged to be push-fitted over the first part so that the crevice nozzle and the brush section are stored within the second part when the second part is connected to the body of the appliance.

In a fourth aspectexample, the present inventiondisclosure provides an attachment for a vacuum cleaning appliance, the attachment comprising:

a first part comprising a brush section comprising a plurality of bristles and a bristle sleeve extending about the bristles and arranged such that at least the tips of the bristles protrude forwardly from the sleeve, and a first connector for connecting the first part to a body of the appliance; and

a second part comprising a suction inlet and a second connector for connecting the second part to the body of the appliance, and wherein the second part is arranged to be push-fitted over the first part so that the brush section is stored within the second part when the second part is connected to the body of the appliance.

Features described above in connection to the first aspect of the inventiondisclosure are equally applicable to each of the second to fourth aspects examples of the inventiondisclosure, and vice versa.

BRIEF DESCRIPTION OF THE DRAWINGS

Preferred features of the invention will now be described, by way of example only, with reference to the accompanying drawings, in which: