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(54) **SURFACE TREATING APPLIANCE**

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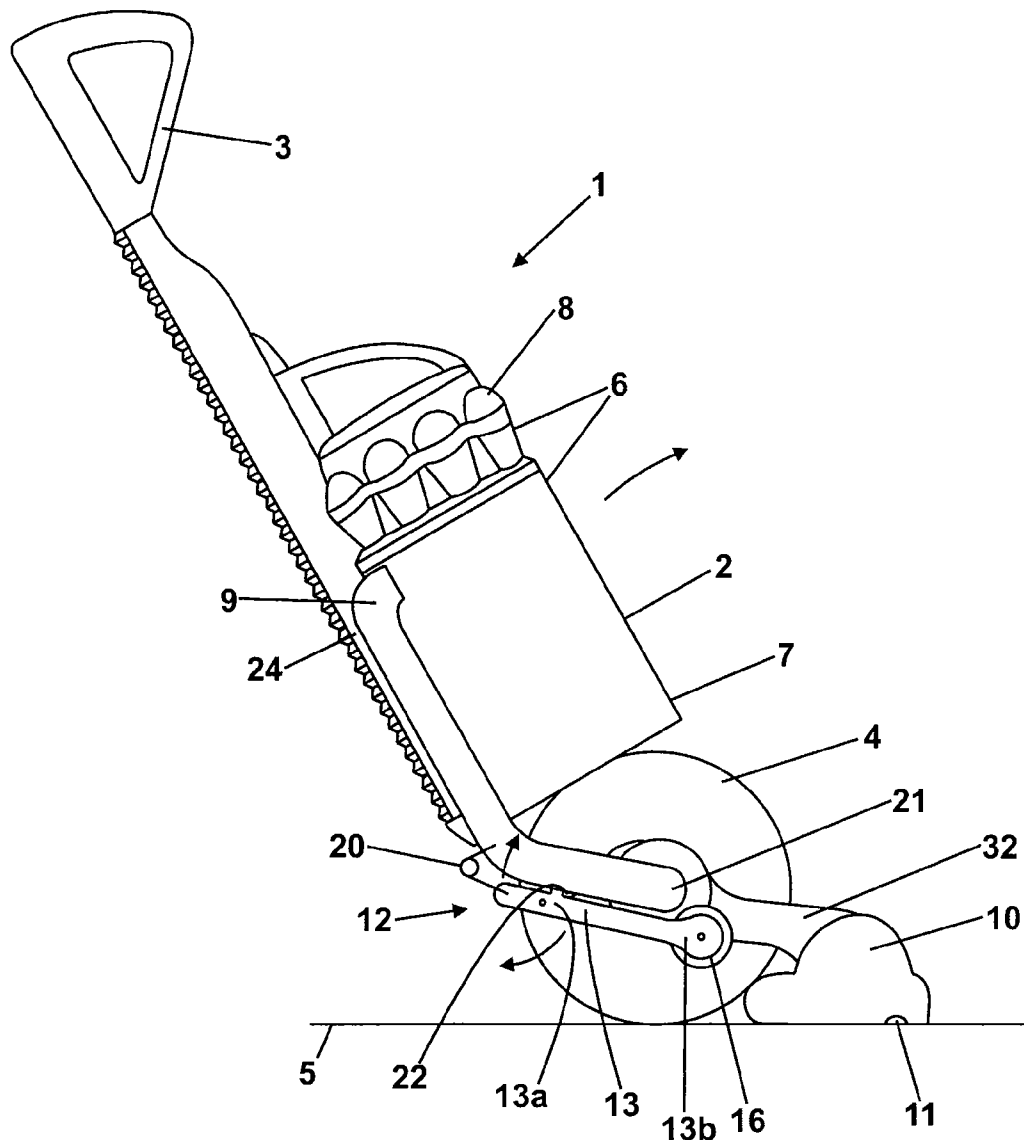
(57) **ABSTRACT**

A surface-treating appliance includes a main body, a surface-treating head, a stand, a lock, and a hose or wand assembly. The lock is arranged to lock the stand in a supporting position, where it supports the main body in an upright position, in response to use of the wand or hose.

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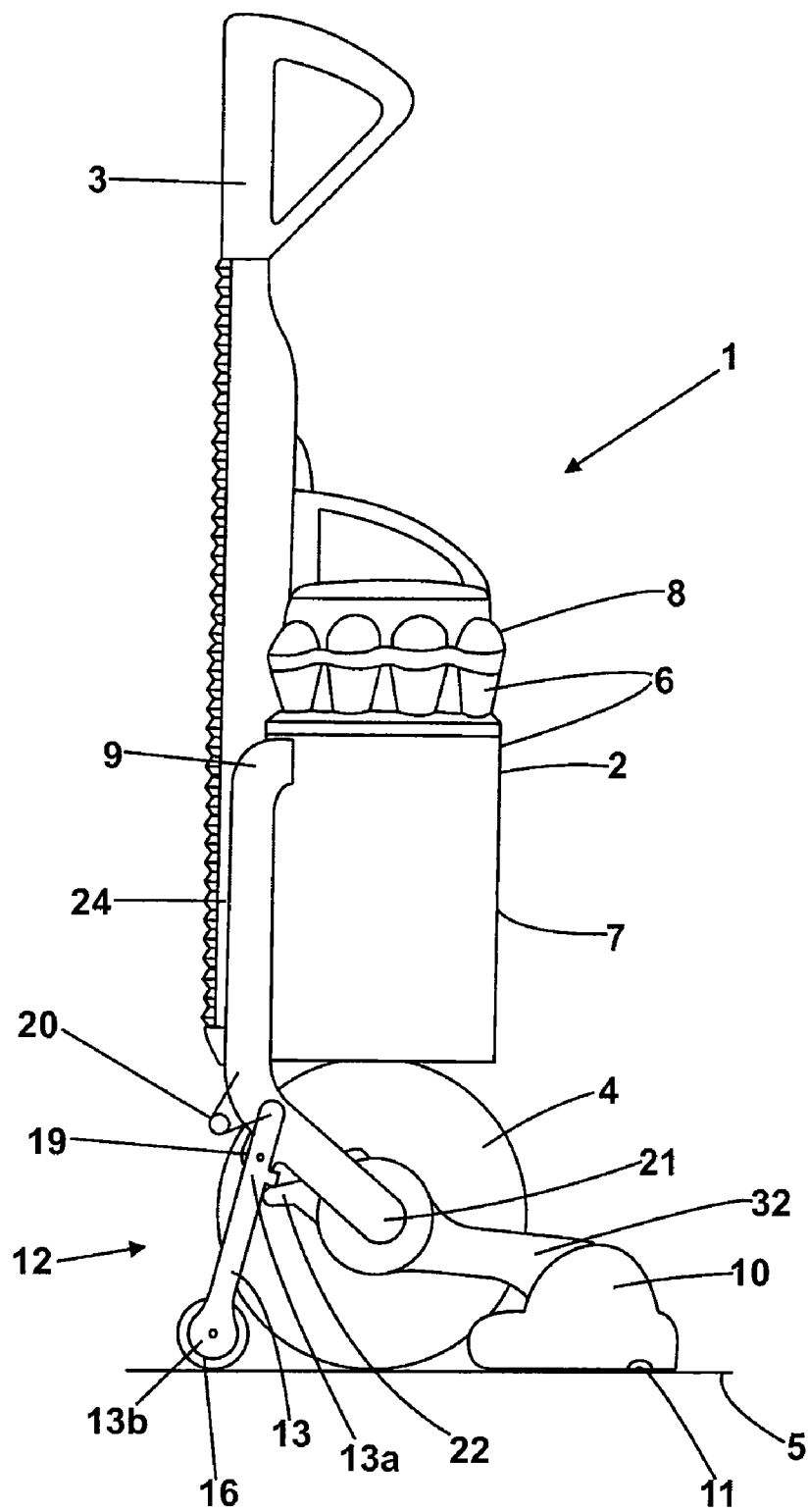


Fig. 1

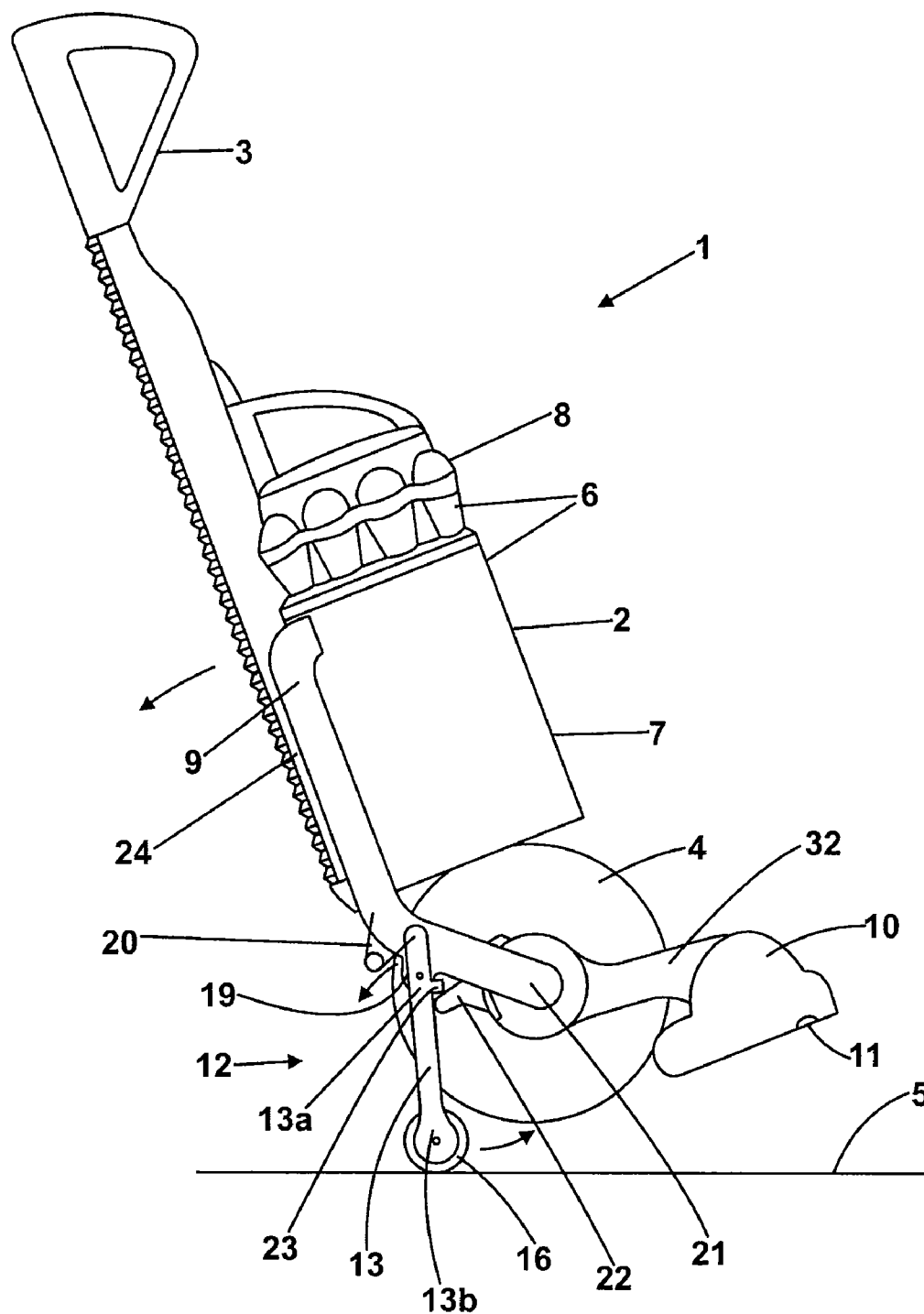


Fig. 2

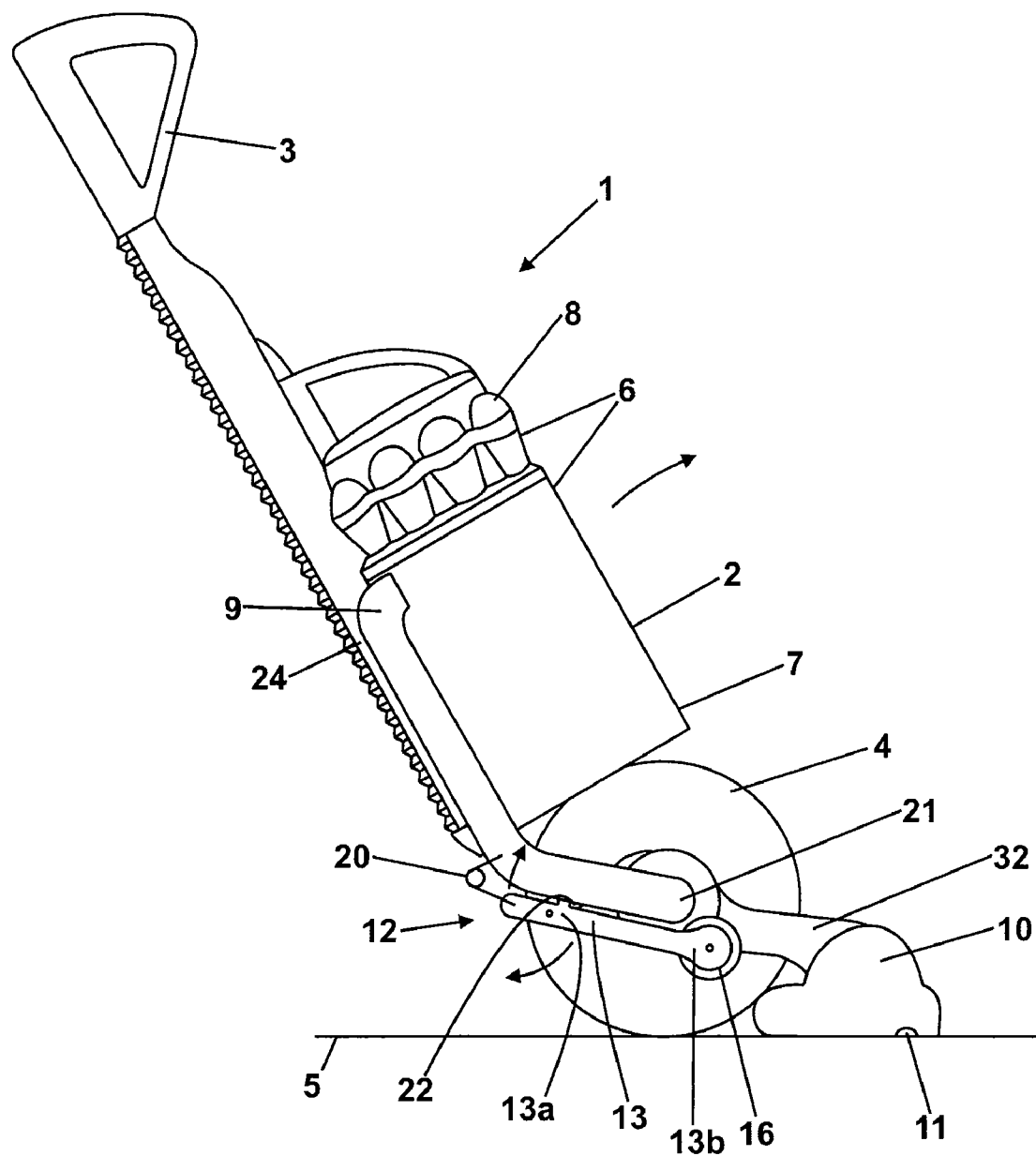


Fig. 3

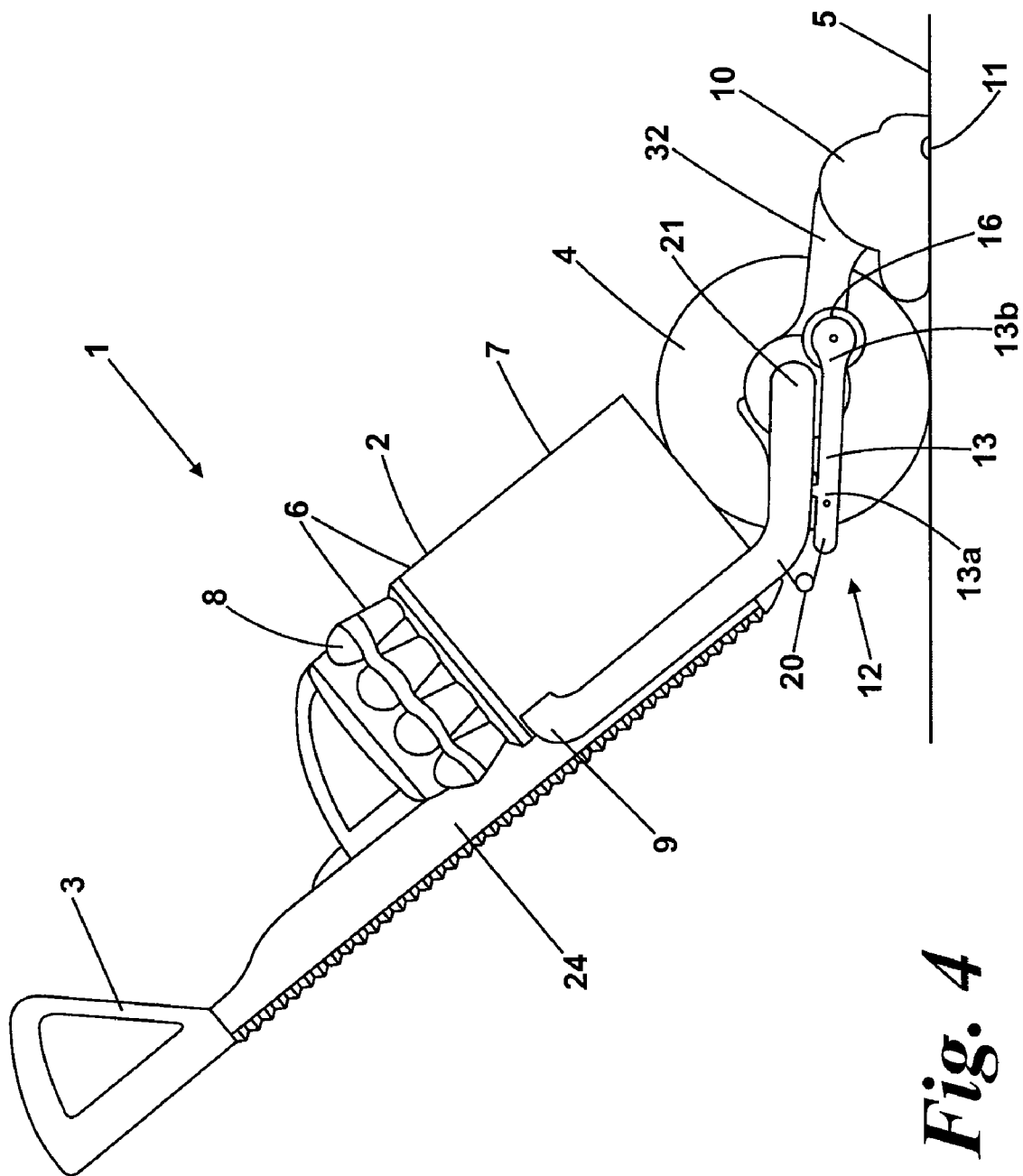


Fig. 4

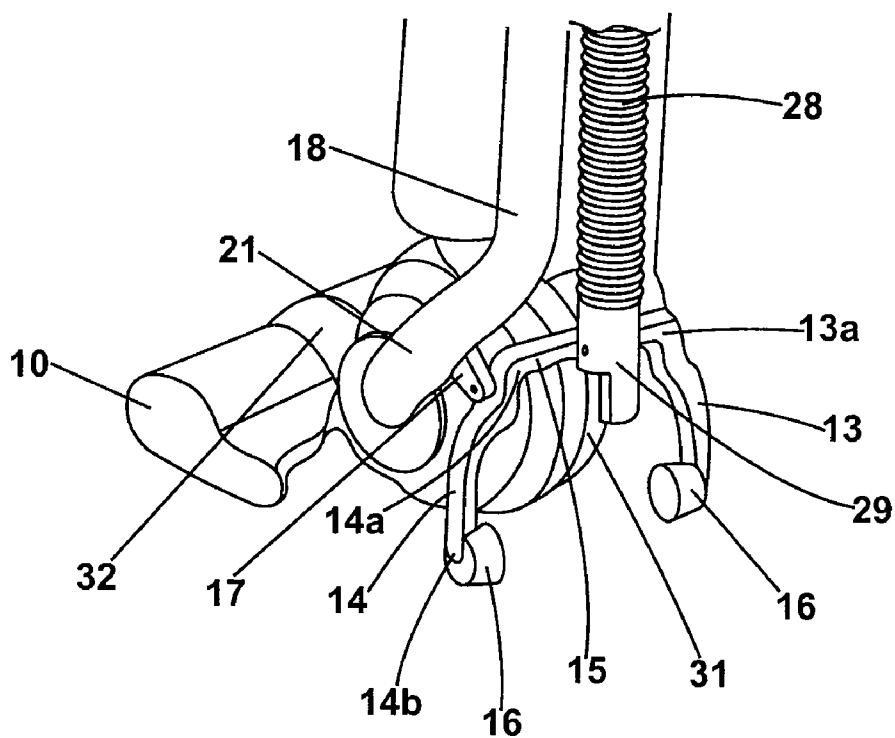


Fig. 5a

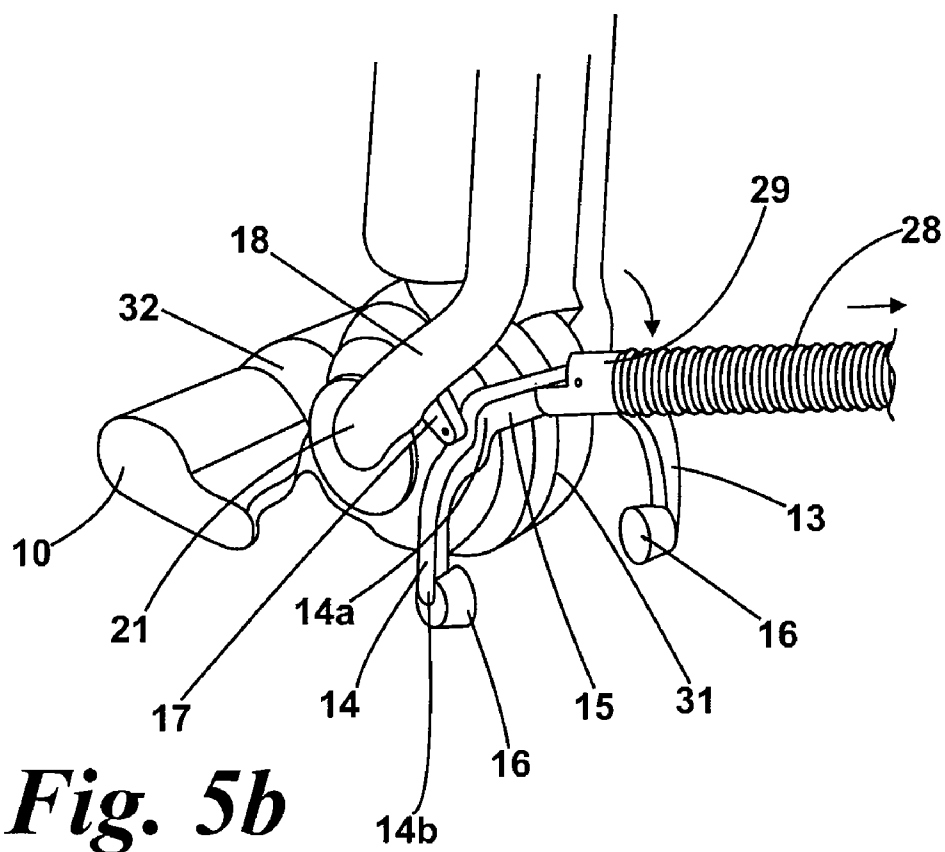


Fig. 5b

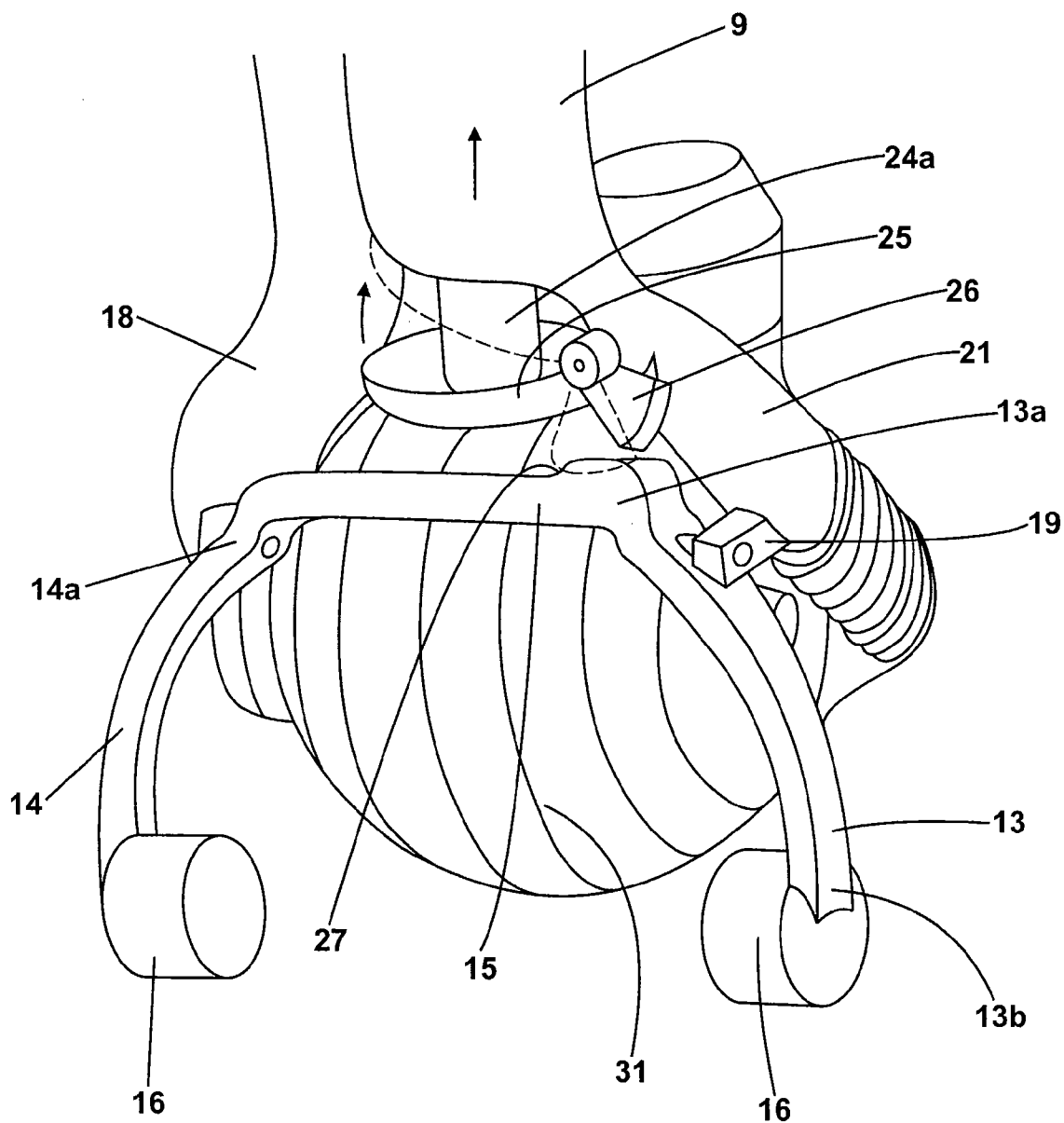


Fig. 6

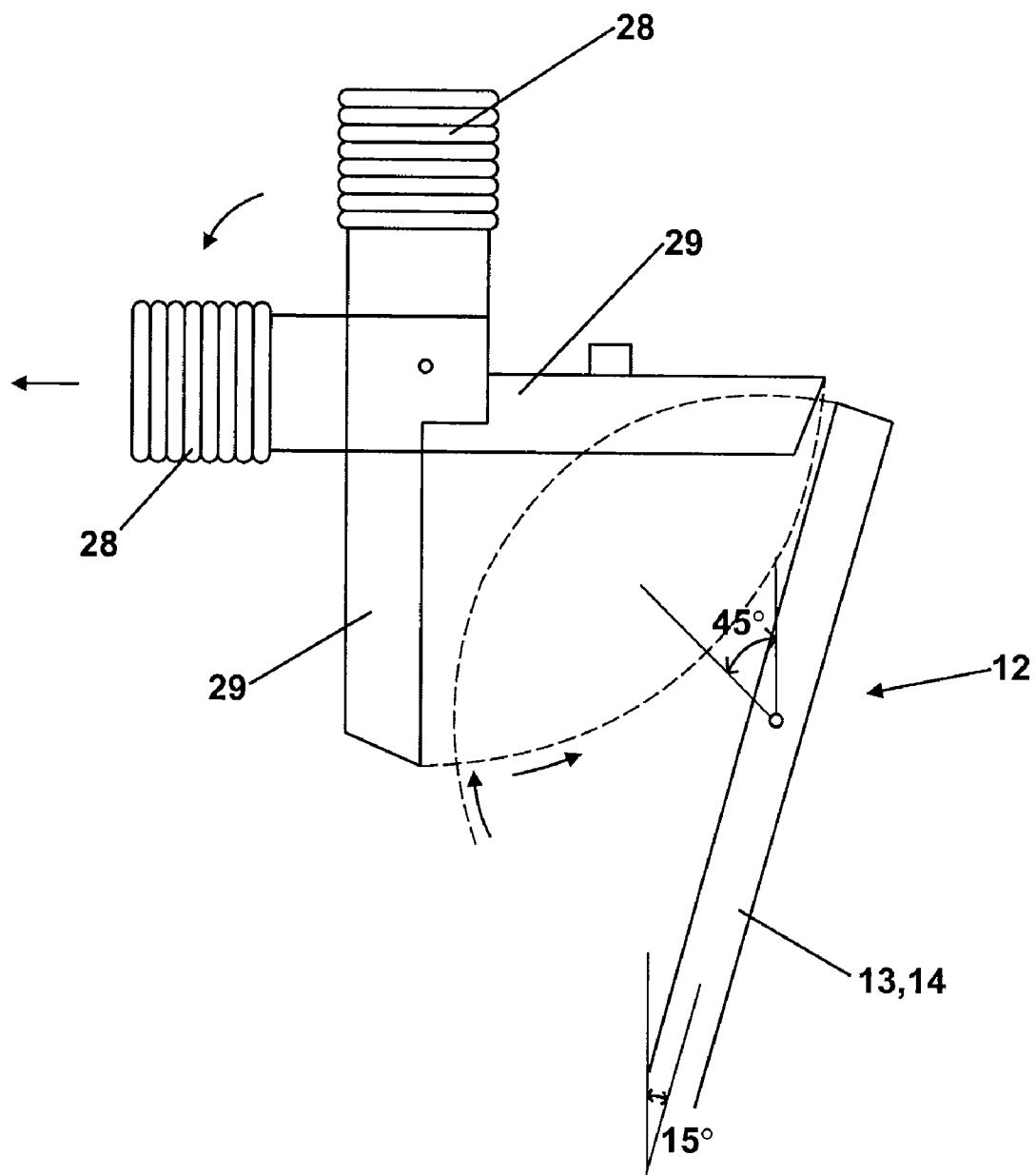


Fig. 7

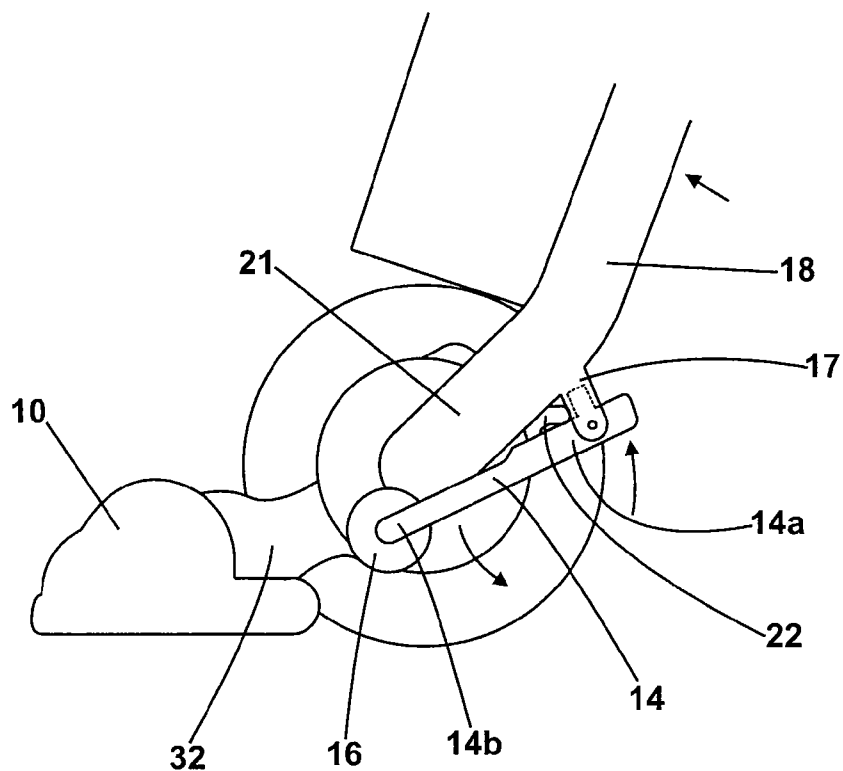


Fig. 8a

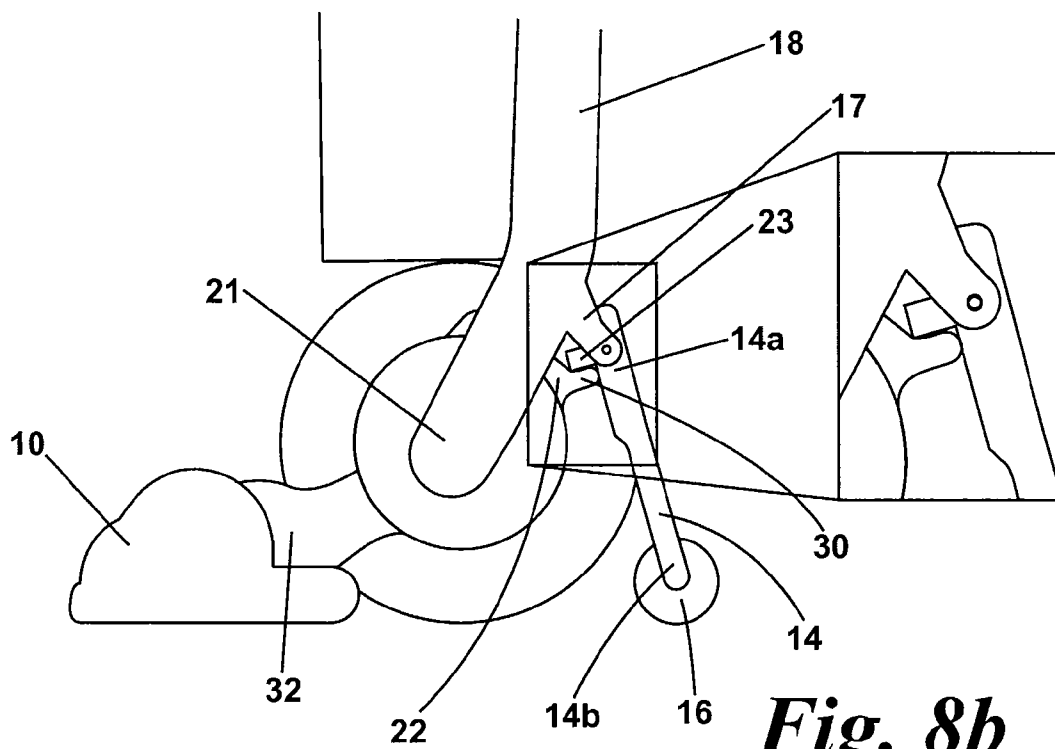


Fig. 8b

SURFACE TREATING APPLIANCE

REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the priority of United Kingdom Application No. 0717488.1, filed Sep. 8, 2007, the contents of which are incorporated herein by reference.

FIELD OF THE INVENTION

[0002] The present invention relates to a surface treating appliance such as a vacuum cleaner.

BACKGROUND OF THE INVENTION

[0003] An upright vacuum cleaner generally comprises a cleaner head rotatably mounted to the lower end of the main body of the vacuum cleaner. The cleaner head has a downwardly directed dirty air inlet through which dirty air is sucked into dust separation apparatus. The dust separation apparatus usually takes the form of a bag or a cyclonic separator. This type of vacuum cleaner is often convertible between an upright mode of operation and a cylinder mode of operation.

[0004] In the upright mode, the vacuum cleaner is moved over the surface to be cleaned so that the dirty air enters the dust separation apparatus via the dirty air inlet in the cleaner head whilst the main body is inclined rearwardly. The vacuum cleaner comprises an upwardly extending handle which the user can use to move the vacuum cleaner over the surface to be cleaned.

[0005] In the cylinder mode, the main body is put into an upright position and a hose and/or wand, which may be connected to the vacuum cleaner by a length of flexible hose, is used to introduce dirty air to the dust separation apparatus.

[0006] One known type of upright vacuum cleaner comprises a wand having a generally rigid pipe portion and a generally flexible hose portion. The hose portion is connected at one end to the main body of the vacuum cleaner and at the other end to the rigid pipe. The rigid pipe is selectively connectable to the main body of the vacuum cleaner so as to form a handle for the cleaner in an upright mode, or a wand in a cylinder mode. This arrangement avoids the need to store an additional pipe on the cleaner for use as a wand, since the pipe serves as both a handle for the cleaner and a wand.

[0007] In the upright mode, the rigid pipe portion is slid telescopically inside the hose portion and secured to the back of the main body of the vacuum cleaner so that the rigid pipe portion extends upwardly from the main body to form a handle. The user can then grasp the handle to move the cleaner head over the surface to be cleaned.

[0008] In the cylinder mode, the rigid pipe portion is connected to the main body of the vacuum cleaner via the flexible hose. The pipe portion is released from the main body of the cleaner to allow a user to grip the rigid pipe portion and to manoeuvre it freely with respect to the main body in the manner of a wand. Tools such as a nozzle or brush are attached to the distal end of the rigid pipe portion, which forms the dirty air inlet of the vacuum cleaner for cleaning those parts of a room which cannot be reached with the normal cleaner head, such as confined spaces, furnishings and other above-floor cleaning.

[0009] Other known types of upright vacuum cleaner comprise a flexible hose which is connected at a first end to the main body of the vacuum cleaner and at its second end is

selectively connectable to the main body of the vacuum cleaner so as to be storable on the main body in the upright mode.

[0010] In the cylinder mode the second end of the hose is released from the main body of the cleaner and gripped by a user who can then manoeuvre it freely with respect to the main body. Tools such as a nozzle or brush may be attached to the second end of the hose, which then forms the dirty air inlet of the vacuum cleaner for cleaning those parts of a room which cannot be reached with the normal cleaner head, such as confined spaces, furnishings and other above-floor cleaning.

[0011] While a wand and/or a flexible hose allows a user freedom in their cleaning, such use can make the appliance unstable. If a user pulls too hard on the hose and/or wand the appliance may tip over.

[0012] This may be a particular problem in appliances such as those described in our patent application GB2391459 which describes an appliance which has been made more manoeuvrable by substituting a wide rolling support for the supporting wheels. Such an appliance requires further support when in the upright or vertical position and it has been proposed to use a support assembly which may be actuated by raising the main body into its upright position and deactivated by pressing an actuator pedal, such as is described in our patent application GB0500992. However, such a support structure may not provide adequate support when a user pulls on the hose and/or wand during use. If a user pulls too hard it is possible that the stand may accidentally deactivate and the appliance may fall over.

SUMMARY OF THE INVENTION

[0013] Accordingly the present invention provides a surface-treating appliance comprising a main body, a surface-treating head, a stand, a lock, and a hose and/or wand assembly, the lock being arranged to lock the stand in a supporting position, where it supports the main body in an upright position, in response to use of the wand and/or hose.

[0014] Providing such a lock advantageously helps to prevent the appliance from falling over when the hose and/or wand assembly is in use.

[0015] In a preferred embodiment the lock comprises a member associated with the hose and/or wand assembly which engages with a portion of the stand when the hose and/or wand assembly is in use. This engagement of the member and the portion helps to retain the stand in its supporting position and prevent it from accidentally collapsing into its stored position.

[0016] The lock is preferably arranged such that when the hose and/or wand assembly is not in use the member does not engage with the portion of the stand and therefore the stand can be released into its stored position. In a preferred embodiment the lock is arranged to be automatically released when the hose and/or wand assembly is stored on the main body.

[0017] Preferably the hose and/or wand assembly is pivotably mounted to the main body such that when the hose and/or wand assembly is removed from its storage position on the main body for use, an abutment member swivels into contact with the stand, locking it in its supporting position.

[0018] Alternatively the lock may comprise a change over valve lock. In a particular embodiment the change over valve lock may comprise an abutment member which engages with a recess in the stand locking it in the supporting position when

the hose and/or wand is removed from its storage position on the main body of the appliance.

[0019] In a particular embodiment the lock may comprise a hose lock. In a preferred embodiment the hose lock may be arranged to lock the stand in the supporting position during use of the hose, such that if a user applies a rearward and/or an upward pulling force to the hose, the stand is locked in the supporting position. This is advantageous as it helps to ensure that the appliance does not fall over whilst the hose is in use. In a particular embodiment the hose lock comprises an abutment member which, when the hose is pulled away from the appliance, presses against the stand, locking it in the supporting position. In an embodiment the hose may be pivotably mounted to the main body such that when the hose is being used for above the ground cleaning the hose lock swivels into contact with the stand. The hose lock is preferably arranged to be automatically released when the hose is stored on the main body.

[0020] In an alternative embodiment the lock may comprise a change over valve lock. In an embodiment, the change over valve lock may be arranged to lock the stand in the supporting position during use of the wand. In a preferred embodiment the change over valve lock may be arranged to lock the stand in the supporting position on removal of the wand from its storage position on the main body. This is advantageous as it helps to ensure that the appliance does not fall over whilst the wand is in use. In a particular embodiment the change over valve lock comprises an abutment member which presses against the stand, locking it in the supporting position, when the wand is removed from its storage position on the appliance. In an alternative embodiment the change over valve lock comprises an abutment member which during use of the wand engages with a recess in the stand. The change over valve lock is preferably arranged to be automatically released when the wand is placed in its storage position on the main body.

[0021] In a preferred embodiment the stand is arranged to move between the supporting and stored positions automatically in response to movement of the main body between its upright position and an inclined position, when the wand and/or hose is not in use.

[0022] In this embodiment the appliance advantageously requires no direct action by a user in order to raise and lower the stand. A user simply tips the main body ready for use and the stand automatically moves into its stored position. In particular the stand is pedaled or actuatorless and therefore a user does not have to find and compress a pedal or other actuator, for example a lever or button, in order to move the stand into the stored position. In this way, the stand is operated without any physical manipulation of the stand or other direct intervention by the user and as such is "automatic" within the meaning of this invention.

[0023] The stand is preferably arranged to be moveable from the supporting position to the stored position in response to the main body of the appliance being tipped rearwardly until its weight is over centre of the stand. In a preferred embodiment the stand does not have a balance point. In a particular embodiment this is achieved by ensuring that the centre of gravity of the main body is behind the stand when the stand is at substantially 90 degrees to a floor surface on which the appliance is placed. This is advantageous since a common problem with existing support assemblies is that they may have a balance point at which the support assembly is neither up nor down. This may be dangerous, since if the

appliance is left standing at this balance point a small knock to the appliance could result in it falling over, which could damage the appliance and/or cause an injury to a user.

[0024] The appliance may further comprise resilient biasing means, for example one or more over-centre spring mechanisms to assist in moving the stand between the stored and supporting positions.

[0025] At least one cam mechanism may additionally or alternatively be provided. In a preferred embodiment, the cam mechanism may be arranged such that when the main body of the appliance is raised from an inclined position to its upright position, the cam mechanism urges the stand into the supporting position. The cam mechanism may for example comprise an actuator, for example an actuator located on the surface treating head. When the main body of the appliance is raised from an inclined position to its upright position by a user, the actuator may be arranged to engage with and push against a portion of the stand to urge the stand into the supporting position.

[0026] In an embodiment, the appliance may further comprise a wheel or roller which may be rotatably mounted to the main body for allowing the main body to be moved along a surface. The wheel or roller may comprise one or more rotatable members having an outer surface which define a substantially continuous rolling support surface in a direction perpendicular to a longitudinal axis of the main body, the support surface preferably being symmetrical about the longitudinal axis of the main body. The wheel or roller may house a component of the appliance, for example a motor and/or fan arrangement arranged, in use, to generate a fluid flow.

[0027] Additionally the appliance may further comprise an upright lock for locking the surface-treating head in a fixed position with respect to the main body when the stand is in the supporting position. This advantageously will allow the entire appliance to be lifted off the floor and carried without the surface treating head falling towards the floor. The upright lock is arranged to be automatically released when the main body is tipped into an inclined position for use.

[0028] This invention is particularly suitable for inclusion in upright vacuum cleaners, for example upright vacuum cleaners having a wide, ball-like rolling support assembly, but may be applied to more conventional upright cleaners and other domestic appliances. In a particular embodiment the vacuum cleaner may further comprising cyclonic dirt and dust separating means.

[0029] The term "surface treating appliance" is intended to have a broad meaning, and includes a wide range of appliances having a surface treating head for traveling over a surface to clean or treat the surface in some manner. It includes, inter alia, appliances which apply suction to the surface so as to draw material from it, such as vacuum cleaners (dry, wet and wet/dry), as well as appliances which apply material to the surface, such as polishing/waxing machines, pressure washing machines, ground marking machines and shampooing machines. It also includes lawn mowers and other cutting machines.

BRIEF DESCRIPTION OF THE DRAWINGS

[0030] The invention will now be described, by way of example, with reference to the accompanying drawings, in which:

[0031] FIG. 1 is a side view of an embodiment of a surface-treating appliance constructed according to the invention with the stand in the supporting position;

[0032] FIG. 2 shows the appliance of FIG. 1 at the point of stand collapse;

[0033] FIG. 3 shows the appliance of FIGS. 1 and 2 at the point of stand activation;

[0034] FIG. 4 shows the appliance of FIGS. 1, 2 and 3 with the stand in the storage position;

[0035] FIG. 5a shows a partial perspective view of an embodiment of the present invention comprising a hose and hose lock, with the hose lock in the unlocked position;

[0036] FIG. 5b shows the appliance of FIG. 5a with the hose lock in the locked position;

[0037] FIG. 6 shows a partial perspective view of an embodiment of the present invention comprising a wand and change over valve lock, with the changeover valve lock shown in the locked (dotted lines) and unlocked positions (solid lines);

[0038] FIG. 7 shows a schematic view of the hose lock of the present invention in both the locked and unlocked positions;

[0039] FIG. 8a shows a partial side view of an embodiment of vacuum cleaner according to the present invention showing the stand in the storage position and the upright lock in its unlocked configuration; and

[0040] FIG. 8b shows the appliance of FIG. 8a showing the stand in its supporting position and the upright lock in the locked configuration.

DETAILED DESCRIPTION OF THE INVENTION

[0041] All figures are schematic.

[0042] Like reference numerals refer to like parts throughout the specification.

[0043] With reference to FIGS. 1 to 4, the surface treating appliance is shown in the form of a vacuum cleaner and is indicated generally by the reference numeral 1. The vacuum cleaner 1 comprises a main body 2, a user-operable handle 3 and a large roller 4 for rolling the cleaner 1 along a floor surface 5. The roller 4 houses a motor and fan for generating a suction airflow (not visible in these drawings). The main body 2 houses separating apparatus 6 for separating dirt, dust and other debris from a dirty airflow drawn into the cleaner 1 by the fan and motor.

[0044] In this embodiment, the separating apparatus 6 is cyclonic, in which the dirt and dust is spun from the airflow. The cyclonic separating apparatus 6 comprises two stages of cyclone separation arranged in series with one another. The first stage is a cylindrically-walled chamber 7 and the second stage comprises a set of tapering, substantially frusto-conically shaped chambers 8 arranged in parallel with one another. Airflow is directed tangentially into the upper part of the chamber 7 by a duct 9. Larger debris and particles are removed and collected in this cyclonic chamber 7. The airflow then passes through a shroud (not shown) to the set of cyclonic chambers 8. Finer dust is separated by these chambers 8 and collected in a common collecting region. The second set of separators 8 can be upright, i.e. with their fluid inlets and outlets at the top and their dirt outlets at the bottom, or inverted, i.e. with their fluid inlets and outlets at the bottom and their dirt outlets at the top. The nature of the separating apparatus 6 is not material to the present invention.

[0045] The main body 2 also houses filters (not visible in these drawings) for trapping fine particles in the cleaned

airflow. These filters remove any fine particles of dust which have not already been removed from the airflow by the separating apparatus 6. A first filter, called a pre-motor filter, is provided before the motor and fan. A second filter, called a post-motor filter, is provided after the motor and fan. Where the motor for driving the suction fan has carbon brushes, the post-motor filter also serves to trap any carbon particles emitted by the brushes. Clean air is then expelled to the atmosphere.

[0046] A cleaner head 10 is pivotably mounted to the lower end of the main body 2, and serves, in use, to treat the floor surface 5. The lower, floor-facing side of the cleaner head 10 has an air inlet slot 11.

[0047] The roller 4 permits the cleaner 1 to be manoeuvred easily along a floor surface 5. However, the roller 4 may not provide sufficient support for the cleaner 1 when the main body 2 is in the upright i.e. vertical or substantially vertical position. To this end, a stand indicated generally at 12 is provided.

[0048] With reference to FIGS. 1 to 4, 5a, 5b and 6 it can be seen that the stand 12 comprises two legs 13, 14, with a reinforcing strut 15 extending between their top end portions 13a, 14a. The bottom end portions 13b, 14b of the legs 13, 14 nearest the floor surface 5, in the embodiments shown, further comprise wheels 16. These wheels 16 may however not be present. The wheels 16 are rotatably mounted to each end 13b, and 14b of the legs 13, 14. The wheels 16 are arranged inside the legs 13, 14 of the stand 12.

[0049] The top end portions 13a and 14a of the legs 13, 14 are pivotably mounted to the main body 2 of the cleaner 1. In the embodiment shown the left leg 14 is pivotably mounted to a first protrusion 17 extending from the outlet duct 18 which transports air which has passed through the separating apparatus 6 to an exhaust (not shown). The right leg 13 is pivotably mounted to a second protrusion 19 extending from duct 9 which transports air from the air inlet slot 11 to the separating apparatus 6. This arrangement ensures that the main body 2 bears against the top of the stand 12 when it is in the supporting position as shown in FIG. 1. The stand 12 is arranged such that the bottom ends 13b, 14b of the legs 13, 14 protrude rearwardly of the cleaner for better stability. The legs 13, 14 therefore bear at least a part of the load of the cleaner 1 when in the upright position. As can be seen in FIG. 1, the main body 2 is inclined backwards slightly in the upright position shown in this embodiment. Of course the main body 2 could be vertical or inclined forwards slightly in the "upright position".

[0050] The stand 12 also comprises an over centre spring mechanism 20 which assists in moving the stand 12 between the supporting position as shown in FIG. 1 and the stored position as shown in FIG. 4.

[0051] When the cleaner 1 is to be used in conventional floor cleaning mode, the user reclines the main body 2. Reclining the main body 2 moves the cleaner 1 towards the position shown in FIG. 2. At the point shown in FIG. 2, the centre of gravity of the cleaner 1 is behind the pivot points of the legs 13, 14 and the spring mechanism 20 forces the stand 12 to move into the stored position shown in FIG. 4. This arrangement is advantageous since it ensures that the stand 12 cannot rest at the balance point shown in FIG. 2 where the stand 12 is neither up nor down. Once the spring mechanism 20 has activated, the stand 12 will move into the position shown in FIG. 4, where the legs 13, 14 and wheels 16 are held off the floor 5 and are preferably tucked under a yoke 21,

which provides the connection between the main body 2 and the cleaner head 10. When the stand 12 is in the storage position, the main body 2 no longer bears against the arms 13, 14 of the stand 12, but is instead supported by a user holding the handle 3. The cleaner 1 is now able to be used for cleaning a floor surface 5, via the surface treating head 10.

[0052] When the user wishes to return the cleaner 1 to the upright position, he pivotally moves the main body 2 back towards the position shown in FIG. 1 via the position shown in FIG. 3. FIG. 3 shows the stand 12 about to be activated into the supporting position. As the main body 2 is moved towards the upright position, a region 22 (see FIG. 2 and FIG. 8b) of the yoke 21 bears against a protrusion 23 extending from an inner surface of the top end 13a, 14a of one of the legs 13, 14, urging the stand 12, away from the yolk 21 towards the supporting position. At the point shown in FIG. 3, the spring mechanism 20 forces the stand 12 to move into the support position shown in FIG. 1. This spring mechanism 20 therefore ensures that the stand 12 cannot rest at the balance point shown in FIG. 2 where the stand 12 is neither up nor down. Once the spring mechanism 20 has activated the stand 12 will move into the position shown in FIG. 1, where the legs 13, 14 and wheels 16 are in contact with the floor 5 behind the cleaner 1.

[0053] Thus, the user may release the handle 3, leaving the main body 2 to be supported by the stand 12. The cleaner 1 is then supported in its upright position. The handle 3 extends upwardly from the rear part of the main body 2. When the cleaner 1 is in the position shown in FIG. 1, it can be used in a so called "cylinder mode", for above-floor cleaning in which case the handle 3 may be released and used as a hose and wand assembly 24.

[0054] As can be seen in FIG. 6 the vacuum cleaner 1 comprises a changeover valve 25 which is arranged to open the air inlet at the distal end of the wand 24a and connect it to the separating apparatus 6 in response to the wand 24a being released from its storage position on the main body 2 for above ground cleaning. The changeover valve 25 is also arranged to automatically shut off the air inlet at the distal end of the wand 24a and connect the separating apparatus 6 to the inlet 11 in the cleaner head 10 in response to the wand 24a being placed in its storage position on the cleaner main body 2.

[0055] The changeover valve 25 is pivotally attached to the main body 2 and further comprises a change over valve lock 26. When the changeover valve 25 swivels to open the air inlet at the distal end of the wand 24a, the change over valve lock 26 is brought into contact with a recess 27 on the reinforcing strut 15 which extends between the top end portions 13a, 14a of the legs 13, 14. This engagement of the change over valve lock 26 with the recess 27 locks the stand 12 in the supporting position and therefore advantageously prevents the stand 12 from moving into its storage position accidentally if a user pulls on the wand 24a or a hose 28 attached thereto.

[0056] In an alternative embodiment, for example as shown in FIGS. 5a and 5b where the vacuum cleaner 1 comprises a hose 28 and no wand, a hose lock 29 may be provided. The hose 28 is pivotally mounted to the main body 2. When the hose 28 is being used for above the ground cleaning the hose lock 29 contacts the reinforcing strut 15 which extends between the top end portions 13a, 14a of the legs 13, 14. This hose lock 29 is shown in more detail in FIG. 7 where it can be seen that the stand 12 can move freely between its supporting and storage positions when the hose 28 is secured to the main

body 2 (the upright position shown in FIG. 7) but is prevented from moving into its storage configuration when the hose 28 is pulled away from the main body 2 (the horizontal position shown in FIG. 7), for example during use for above ground cleaning. This hose lock 29 can be described as self-tightening since the harder the hose 28 is pulled the tighter the hose lock 29 gets, thus preventing accidental deactivation of the stand 12.

[0057] As can be seen in FIGS. 8a and 8b, when the cleaner 1 is in its upright position, with the stand 12 in the supporting position (FIG. 8b), the cleaner head 10 is caught on a latch 30 and is therefore latched with respect to the main body 2. This enables the user to lift the whole cleaner 1 off the floor 5 without the cleaner head 10 drooping and obstructing manoeuvrability. Tilting the main body 2 rearwardly will release the cleaner head 10 from the latch 30 so that, as the main body 2 of the cleaner 1 is reclined, the head 10 remains in contact with the floor surface 5 to be treated.

[0058] The main body 2 is rotatably connected to the roller 4, which lies at the base of the main body 2. The roller 4 allows the apparatus to be easily pushed or pulled along a surface 5. The shape of the roller 4 and the connections between the main body 2 and the roller 4, and the roller 4 and the cleaner head 10, allow the cleaner 1 to be more easily manoeuvred than traditional vacuum cleaners.

[0059] The overall shape of the roller 4 resembles a barrel. Looking at the shape of the outer surface in the direction along the longitudinal axis, there is a generally flat central region and an arcuate region at each end where the diameter, or width, of the shell decreases. A flat central region aids a user in steering the cleaner 1 along a straight line, since it will naturally run straight and is less likely to wobble during backwards movements. Ridges 31 are provided on the outer surface of the roller 4 to improve grip over surfaces.

[0060] The cleaner head 10 is connected to the main body 2 of the vacuum cleaner 1 in such a manner that the cleaner head 10 remains in contact with a floor surface 5 as the main body 2 is manoeuvred through a wide range of operating positions, e.g. when moved from side-to-side or when the main body 2 is twisted about its longitudinal axis. The yoke 21 connects the main body 2 to the cleaner head 10. The yoke 21 is mounted to each end of the rotational axis of the roller 4. The yoke 21 can rotate independently of the main body 2. At the forward, central part of the yoke 21 there is a joint 32, which connects to the cleaner head 10.

[0061] The arrangement of the pivotal mounting of the yoke 21 and joint 32, allows the main body 2 together with the roller 4 to be rotated about its longitudinal axis, in the manner of a corkscrew, while the cleaner head 10 remains in contact with the floor surface 5. This arrangement also causes the cleaner head 10 to point in a new direction as the main body 2 is rotated about its longitudinal axis.

[0062] The support assembly 12 remains neatly tucked up against the yolk 21 during the cleaner's 1 range of motions. This permits the user easily to manoeuvre the cleaner 1, even when cleaning under furniture and other low obstructions.

[0063] While the illustrated embodiment shows a vacuum cleaner 1 in which ducts 9, 18 carry airflow, it will be appreciated that the invention can be applied to cleaners 1 which carry other fluids, such as water and detergents.

[0064] Separation of dust from the airflow could equally be carried out using other means such as a conventional bag-type filter, a porous box filter, an electrostatic separator or some other form of separating apparatus. For embodiments of the

apparatus which are not vacuum cleaners, the main body can house equipment which is appropriate to the task performed by the machine. For example, for a floor polishing machine the main body can house a tank for storing liquid wax

[0065] The head 10 may also carry a brush bar (not shown) which may be connected to and driven by a motor (not shown). The brush bar can alternatively or additionally be driven in other ways, such as by a turbine which is driven by incoming or exhaust airflow, or by a coupling to the motor which is also used to drive the suction fan. The coupling between the motor and brush bar can alternatively be via a geared coupling. In alternative embodiments the brush bar can be removed entirely so that the machine relies entirely on suction or by some other form of agitation of the surface. For other types of surface treating machines, the cleaner head can include appropriate means for treating the floor surface, such as a polishing pad, a liquid or wax dispensing nozzle etc. The lower face of the cleaner head can include small rollers to ease movement across a surface.

- 1. A surface-treating appliance comprising a main body, a surface-treating head, a stand, a lock, and a hose or wand assembly, the lock being arranged to lock the stand in a supporting position, where the stand supports the main body in an upright position in response to use of a wand or hose of the wand or hose assembly.
- 2. A surface-treating appliance according to claim 1 wherein the lock comprises a member associated with the hose or wand assembly which engages with a portion of the stand when the hose or wand assembly is in use.
- 3. A surface-treating appliance according to claim 1 or 2 wherein the hose or wand assembly is pivotably mounted to the main body such that when the hose or wand assembly is removed from its storage position on the main body for use, an abutment member swivels into contact with the stand, locking the hose or wand assembly in its supporting position.
- 4. A surface-treating appliance according to claim 1 or 2 wherein the lock comprises a change over valve lock.
- 5. A surface-treating appliance according to claim 4 wherein the change over valve lock comprises an abutment member which engages with a recess in the stand, locking it in the supporting position when the hose or wand is removed from its storage position on the main body of the appliance.
- 6. A surface-treating appliance according to claim 1 or 2 wherein the lock is arranged to release when the hose or wand assembly is stored on the main body.
- 7. A surface-treating appliance according to claim 1 or 2 wherein the stand is moveable between the supporting and a stored position in response to movement of the main body between its upright position and an inclined position.

8. A surface-treating appliance according to claim 1 or 2 wherein the stand is located on a rear portion of the appliance.

9. A surface-treating appliance according to claim 7 wherein the stand is arranged to be moveable from the supporting position to the stored position in response to the main body of the appliance being tipped rearwardly until its weight is over centre of the stand.

10. A surface-treating appliance according to claim 7 further comprising a resilient biasing member to assist in moving the stand between the stored and supporting positions.

11. A surface-treating appliance according to claim 10 wherein the resilient biasing member comprises one or more over-centre spring mechanisms.

12. A surface-treating appliance according to claim 1 or 2 wherein the stand further comprises at least one cam mechanism which is arranged such that when the main body of the appliance is raised from an inclined position to its upright position the cam mechanism urges the stand into the supporting position.

13. A surface-treating appliance according to claim 12 wherein the cam mechanism comprises an abutment member located on the surface treating head which engages with and pushes against a portion of the stand when the main body of the appliance is raised from an inclined position to its upright position, urging the stand into the supporting position.

14. A surface-treating appliance according to claim 1 or 2, further comprising a wheel or roller which is rotatably mounted to the main body for allowing the main body to be moved along a surface.

15. A surface-treating appliance according to claim 14 wherein the wheel or roller comprises one or more rotatable members having an outer surface which defines a substantially continuous rolling support surface in a direction perpendicular to a longitudinal axis of the main body, the support surface being symmetrical about a longitudinal axis of the main body.

16. A surface-treating appliance as claimed in claim 14, wherein the wheel or roller houses a component of the appliance.

17. A surface-treating appliance as claimed in claim 16, wherein the component comprises a motor and fan arrangement arranged, in use, to generate a fluid flow.

18. A surface-treating appliance as claimed in claim 1 or 2, further comprising an upright lock for locking the surface-treating head in a fixed position with respect to the main body when the stand is in the supporting position.

19. A vacuum cleaner comprising the apparatus of claim 1 or 4.

20. A vacuum cleaner as claimed in claim 19 further comprising a cyclonic dirt and dust separator.

21. (canceled)

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