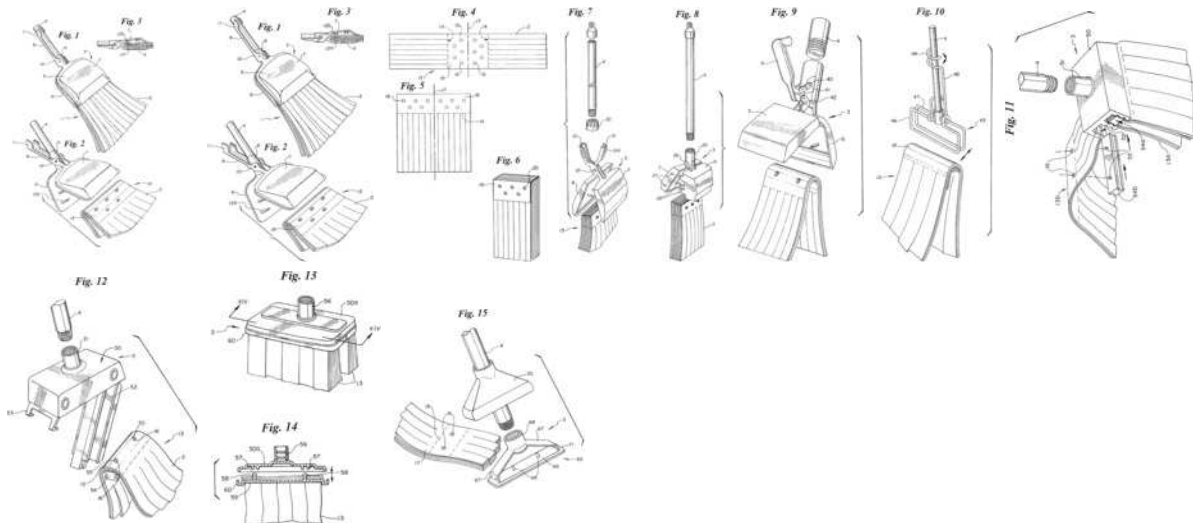
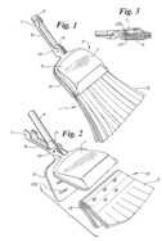


29 results for (mop)/TI/AB/IW/CLMS/DESC/ODES/OBJ/ADB/ICLM/KEYW/TX AND (holder OR socket OR cup)/TI/AB/IW/CLMS/DESC/ODES/OBJ/ADB/ICLM/KEYW/TX AND (concave)/TI/AB/IW/CLMS/DESC/ODES/OBJ/ADB/ICLM/KEYW/TX AND (retainer)/TI/AB/IW/CLMS/DESC/ODES/OBJ/ADB/ICLM/KEYW/TX AND (metal OR steel)/TI/AB/IW/CLMS/DESC/ODES/OBJ/ADB/ICLM/KEYW/TX AND (hole+ OR orifice+)/TI/AB/IW/OBJ/ADB/ICLM) AND (A47L)/IPC - Collection: FAMPAT

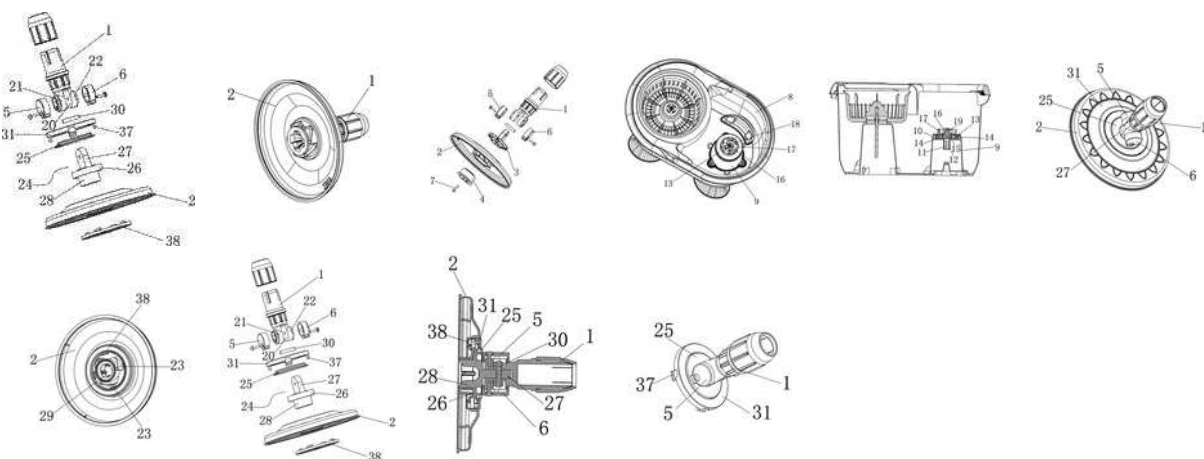
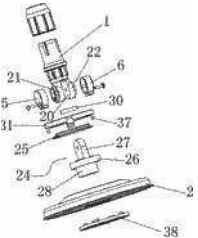
#	Title	Publication number	1st app. date	Applicant/Assignee	1st publ. date	Publ. date
1.	Mop	ES1034136	1995-08-18	3M*	1996-12-16	1996-12-16

A strip mop has a head (101) comprising a holder (103) which is attached to the mop handle (104) and in which a replaceable strip assembly (126, Fig. 21) is located. The strip assembly is formed from layers of absorbent web material cut into strips (102) over part of their length, the uncut parts being located in the holder (103). When the strips (102) become worn, the holder (103) is opened (Fig. 18) so that the strip assembly (126) can be removed and replaced by another.



2.	Mop barrel and novel mop matched with same	CN102920403	2012-10-19	CIXI BOSHENG PLASTIC PRODUCTS*	2013-02-13	2013-02-13
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The invention provides a mop barrel, comprising a barrel body and further comprising a speed reducing device. The speed reducing device comprises a base; a chassis is fixedly arranged at the upper end of the base; a planet gear containing cavity is arranged on the chassis; a circle of a gear ring is arranged on the inner wall of the planet gear containing cavity; a rotating plate is covered on the chassis; a planet gear is arranged on the back face of the rotating plate; the planet gear is engaged with the gear ring; the mop barrel further comprises a sun wheel; the sun wheel is engaged with the planet gear; a driving head is further arranged at the upper end of the sun wheel; and a driven concave-convex part is further arranged on the upper end face of the rotating plate. The invention further provides the novel mop matched with the mop barrel; a friction fixing block on the mop is linked with a stainless steel cover sheet through friction force, and is integrated with a rotating body, so that the concentricity is good, and the more smooth rotation is realized. When a mop rod is vertically arranged, a left friction fixing block and a right friction fixing block are abutted against with a stainless steel cover sheet; and when the mop rod is reversely arranged, the left friction fixing block and the right friction fixing block are in friction with the stainless steel cover sheet. The left friction fixing block and the right friction fixing block are in friction with the stainless steel cover sheet so that the friction consumption is small and the service life is longer.



3. **Mop bucket and novel mop matched with CN202875255**
mop bucket

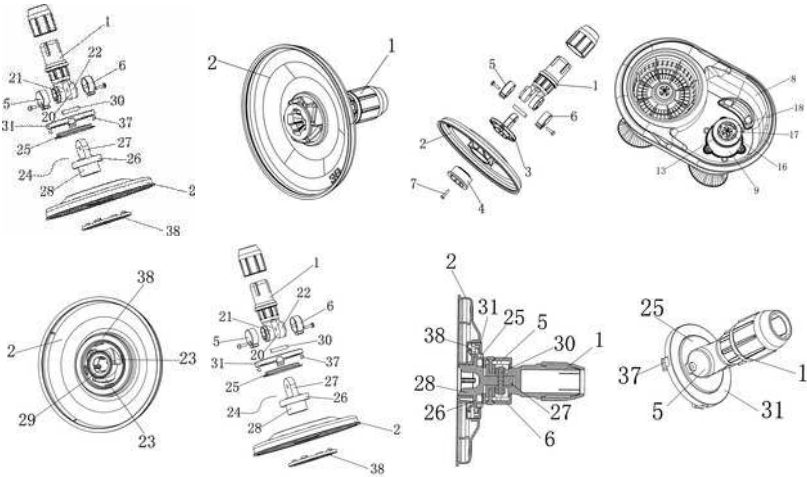
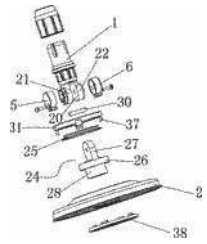
2012-10-19

CIXI BOSHENG PLASTIC PRODUCTS*

2013-04-17

2013-04-17

Provided is a **mop bucket**. The **mop bucket** comprises a bucket body and a reduction gear. The reduction gear comprises a base, a base plate is arranged at the upper end of the base, the base plate is provided with a planet gear accommodation cavity, a ring of gear rings are arranged on the inner wall of the planet gear accommodation cavity, a rotary table is arranged at an upper cover of the base plate, planet gears are arranged at the back side of the rotary table, the planet gears are meshed with the gear rings. The **mop bucket** further comprises a sun wheel, the sun wheel is meshed with the planet gears, a driving head is further arranged at the upper end of the sun wheel, and a driven uneven part is further arranged at the upper end face of the rotary plate. Provided is a novel **mop** matched with the **mop bucket**. Friction fixed blocks on the **mop** are in linkage with a stainless **steel** cover plate through friction force, and a rotator is combined into one, and therefore concentricity is good and rotation is more smooth. When a **mop** rod is upright, a left friction fixed block and a right friction fixed block about the stainless **steel** cover plate; when the **mop** rod is bended, the left friction fixed block and the right friction fixed block rub the stainless **steel** cover plate, the plastic left friction fixed block and the plastic right friction fixed block rub the stainless **steel**, and therefore frictional loss is small and service life is longer.



4. **Novel fixed mop**

CN102920405

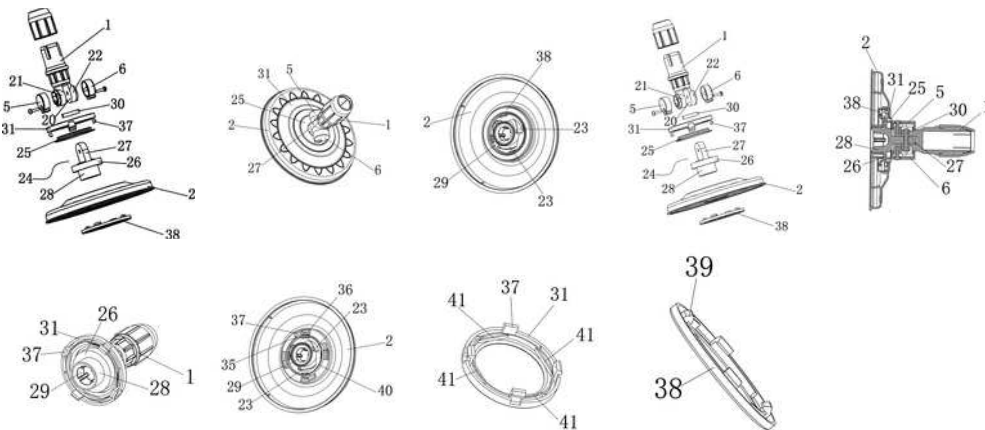
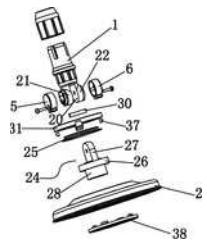
2012-10-19

CIXI BOSHENG PLASTIC PRODUCTS*

2013-02-13

2013-02-13

A novel fixed **mop** comprises a **mop** rod and a **mop** disc, wherein a through **hole** is arranged in the center of the **mop** disc, the lower end of the **mop** rod is provided with an upward insertion **hole**, the insertion **hole** divides the tail portion of the **mop** rod into a left friction fixing arm and a right friction fixing arm, the left friction fixing arm is provided with a plastic left friction fixing block, the right friction fixing arm is provided with a plastic right friction fixing block, driven protruding ribs in a circle are disposed on the periphery of the through **hole** on the back surface of the **mop** disc. The novel fixed **mop** further includes a rotation assembly, a fixing frame is arranged on the back surface of an upper positioning cover ring of the rotation assembly, and a stainless **steel** cover plate of the rotation assembly is limited in the positioning cover ring. The stainless **steel** cover plate can rotate only by removing the positioning frame on the back surface of the upper positioning cover ring, so that the novel fixed **mop** is adaptive to a **mop** bucket with a speed reducing device, i.e. different functions can be achieved by replacing different upper positioning cover rings, and costs in production can be greatly reduced.



5. Mop cleaning set

JP3174187

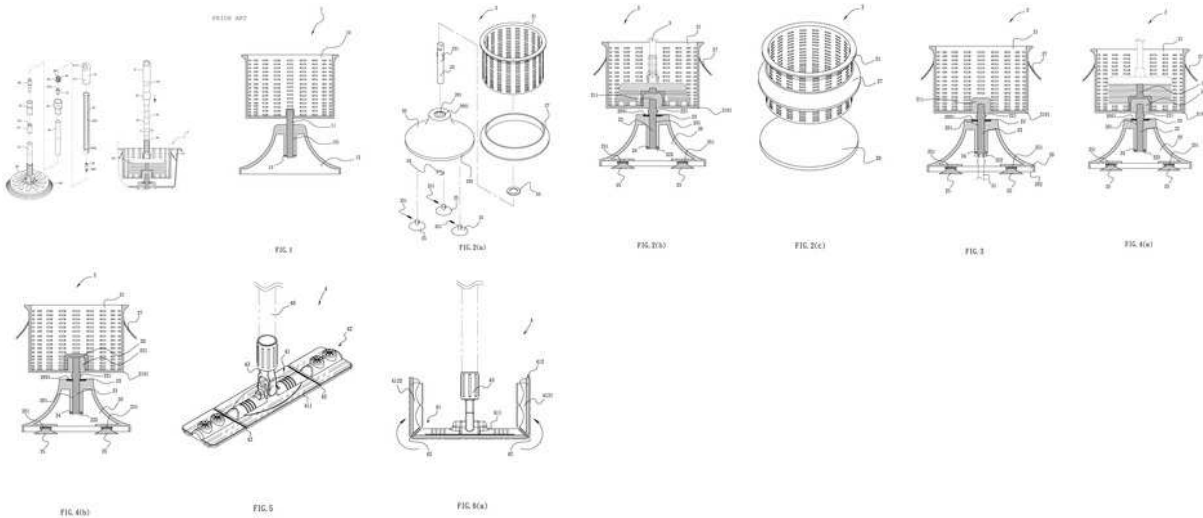
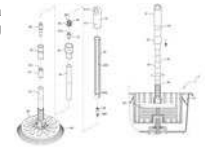
2011-12-20

ROCK TONE ENTERPRISE
ROCK TONE ENTPR*
ROKY TONE ENTERPRISE

2012-03-08

2012-03-08

A mop cleaning set includes a mop structure and a dehydration device, the dehydration device is used for dehydrating the mop structure, the dehydration device comprises a mop supporting unit, and the dehydration device is used for fixing the mop structure so that the mop structure will not be thrown out during a dehydration process by spinning when the centrifugal force is too strong, therefore the invention is convenient to use.



6. Novel fixed type mop

CN202875261

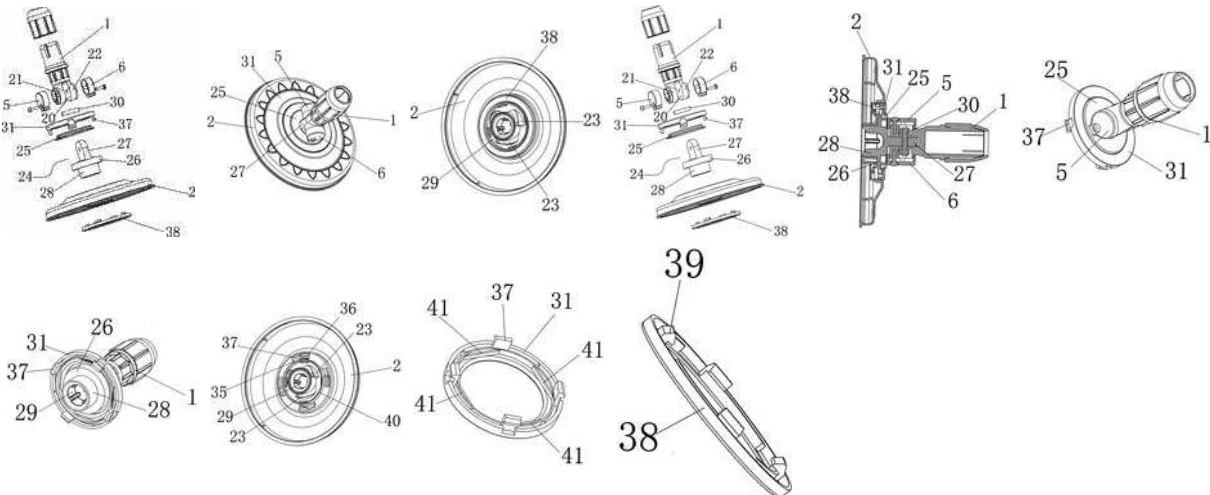
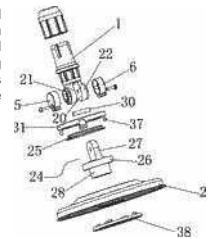
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CIXI BOSHENG PLASTIC PRODUCTS*

2013-04-17

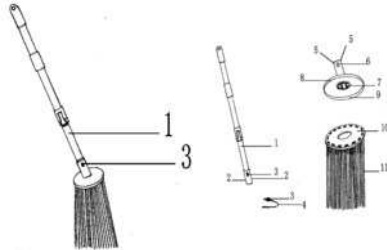
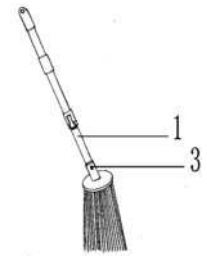
2013-04-17

The utility model discloses a novel fixed type mop which comprises a mop rod and a mop disc, wherein a through opening is formed in the center of the mop disc. An upward inserting opening is formed in the lower end of the mop rod and divides the tail portion of the mop rod into a left friction fixing arm and a right friction fixing arm, the left friction fixing arm is provided with a plastic left friction fixing block, and the right friction fixing arm is provided with a plastic right friction fixing block. A driven protruding rib is arranged on the back face of the mop disc and on the periphery of the through opening. The novel fixed type mop further comprises a rotation driving assembly, wherein a positioning frame is arranged on the back face of an upper positioning cover ring of the rotation driving assembly, and a stainless steel cover piece of the rotation driving assembly is limited inside the positioning frame. As long as the positioning frame on the back face of the upper positioning cover ring is removed, the stainless steel cover piece can rotate so as to adapt to a mop barrel provided with a speed reducing device, and therefore by changing different upper positioning cover rings, different functions can be achieved, and the fact that production cost is greatly saved is benefited.



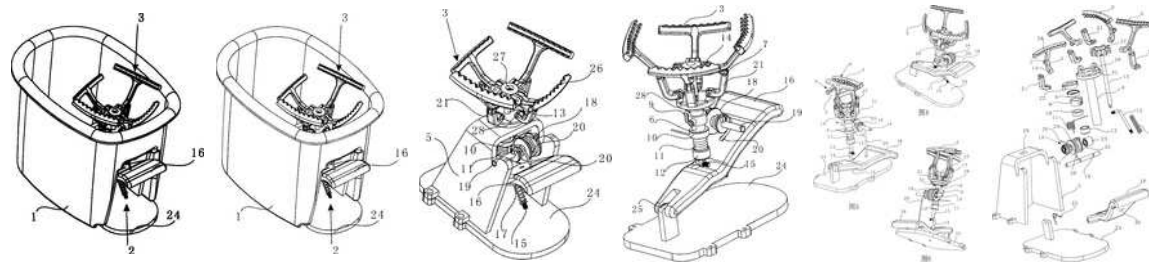
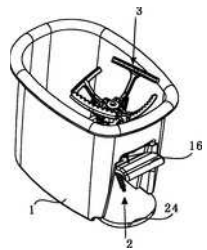
7. Long-thread mop capable of being spin-dried CN204071995 2014-08-16 YAO JIANGUO 2015-01-07 2015-01-07

The utility model discloses a long-thread mop capable of being spin-dried. The long-thread mop is composed of a rotary mop rod and a mop head and is characterized in that a U-shaped elastic sheet is arranged in a cavity in a connector between the mop rod and the mop head, a clamping spring button is arranged at one end of the elastic sheet, the clamping spring button penetrates through the inner wall of the cavity of the connector to protrude out, and two limiting grooves are symmetrically formed in the outer side of the cylindrical connector. The mop head is composed of a mop seat and a mop thread disc, a hollow cylindrical sleeve is arranged at the upper end of the mop seat, two symmetric protruding limiting ribs are arranged on the inner wall of the sleeve, a clamping spring button butt-joint through hole penetrating through the sleeve barrel is formed in the cylindrical sleeve, the lower portion of the mop seat is in a plastic disc shape, a circle of groove formed around the center of the disc is formed in the edge of the disc, a circle of edge rib is arranged on the edge of the groove, a cylindrical inner hole is formed in the center of the bottom of the mop seat, and a plurality of protruding edges are evenly distributed in the inner hole. The mop thread disc is formed by a mop thread fixing disc and mop threads, a plurality of small holes are evenly formed in the outer edge of the round mop thread fixing disc, and a strand of long mop threads is tightly nailed into each small hole. The long-thread mop is simple in structure, the rotary mop rod and a matched rotary mop bucket are matched to be used, spin-drying can be achieved, the mop rod and the mop head are connected in a clamping spring mode, the mop head can be fast dismantled and mounted, and clean-keeping efficiency and quality can be improved.



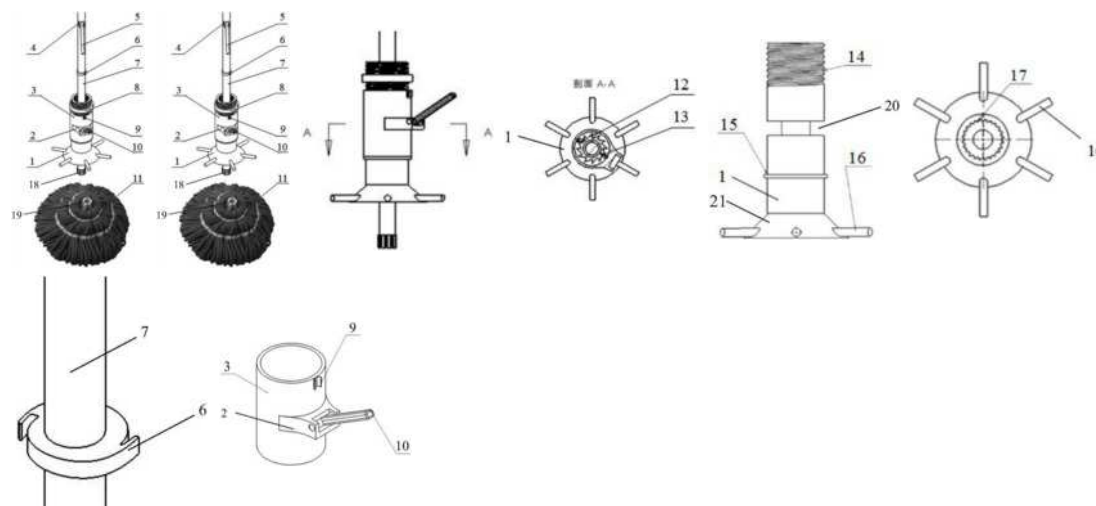
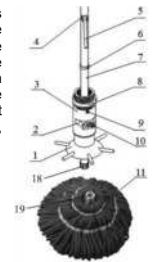
8. Rapid mop twisting barrel CN102058365 2010-12-16 HUIZHOU QIANGLI DAILY NECESSITIES* 2011-05-18 2011-05-18

The invention relates to a rapid mop twisting barrel, comprising a barrel body with a concave inlet on one side, a pedal plate and at least two mop grasping pieces. The rapid mop twisting barrel is characterized in that a supporting frame is arranged in the concave inlet of the barrel body; the upper end of a rotating cylinder is articulated with first joints of the mop grasping pieces; a bearing, the supporting frame, a steel wire fixing sleeve, a first separation sleeve, a first resetting spring and a second separation sleeve are sequentially sheathed on the rotating cylinder from the top down; the upper end of a pull rod is articulated with second joints of the mop grasping pieces, the lower end of the pull rod penetrates through the rotating cylinder and is then loosely connected with a pull-rod connecting piece, and the pull-rod connecting piece penetrates through the pedal plate and is then provided with a pull-rod spring in an insertion manner; two ends of a wheel axle of a steel wire transmission wheel are fixedly connected to the supporting frame; and one end of a steel wire is fixedly connected to the steel wire fixing sleeve, and the other end of the steel wire is wound on the steel wire transmission wheel and is then connected to the pedal plate. The rapid mop twisting barrel is complete in dewatering and convenient in use.



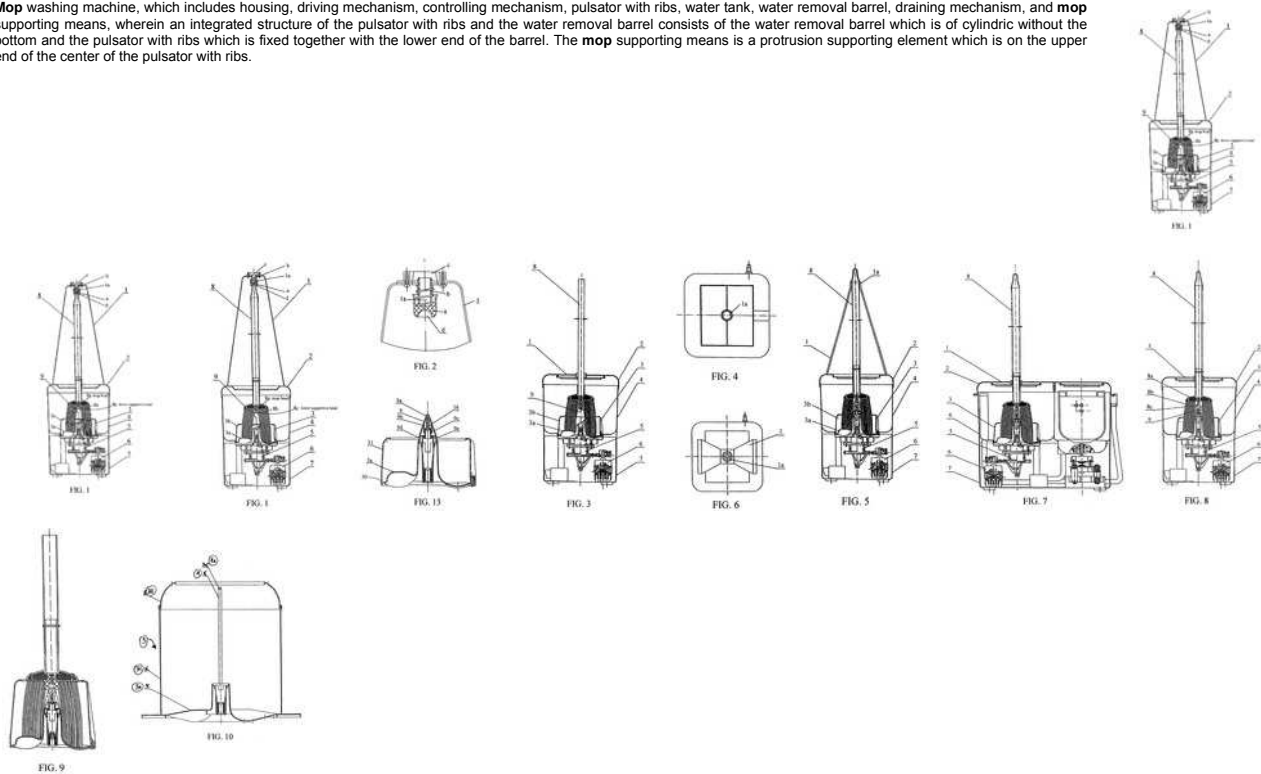
9. Dual ratchet wheel swinging type self-wringing mop CN107997705 2017-12-05 SHANGHAI DIANJI UNIVERSITY* 2018-05-08 2018-05-08

The invention provides a dual ratchet wheel swinging type self-wringing mop. The dual ratchet wheel swinging type self-wringing mop includes: a mop rod, wherein a mop rod pawl is arranged on an intermediate lower part of the mop rod; a rotation sleeve assembly which sleeves the bottom of the mop rod and can vertically slide along the mop rod, wherein the rotation sleeve assembly includes a rotation barrel sleeving the mop rod and an outer sleeve sleeving the rotation barrel, a plurality of clamping jaws are arranged on the bottom of the rotation barrel, an outer sleeve pawl is arranged on an inner wall of the outer sleeve, a rotation barrel outer ratchet wheel is arranged on the rotation barrel, the outer sleeve pawl and the rotation barrel outer ratchet wheel are engaged constantly, and a rotation barrel inner ratchet wheel is arranged on an inner wall of the rotation barrel and positioned above the rotation barrel outer ratchet wheel; and a mop head, wherein the bottom of the mop head is fixed on a bottom end of the mop rod, a fastening hole is formed in the top of the mop head, the mop head is arranged on the rotation barrel and is fixed by the clamping jaws so as to allow the top of the mop head and the rotation barrel to rotate synchronously. The dual ratchet wheel swinging type self-wringing mop can prevent cold and dirty water from contacting hands, has an automatic easywringing function, and is suitable for places such as houses, hotels and office rooms.



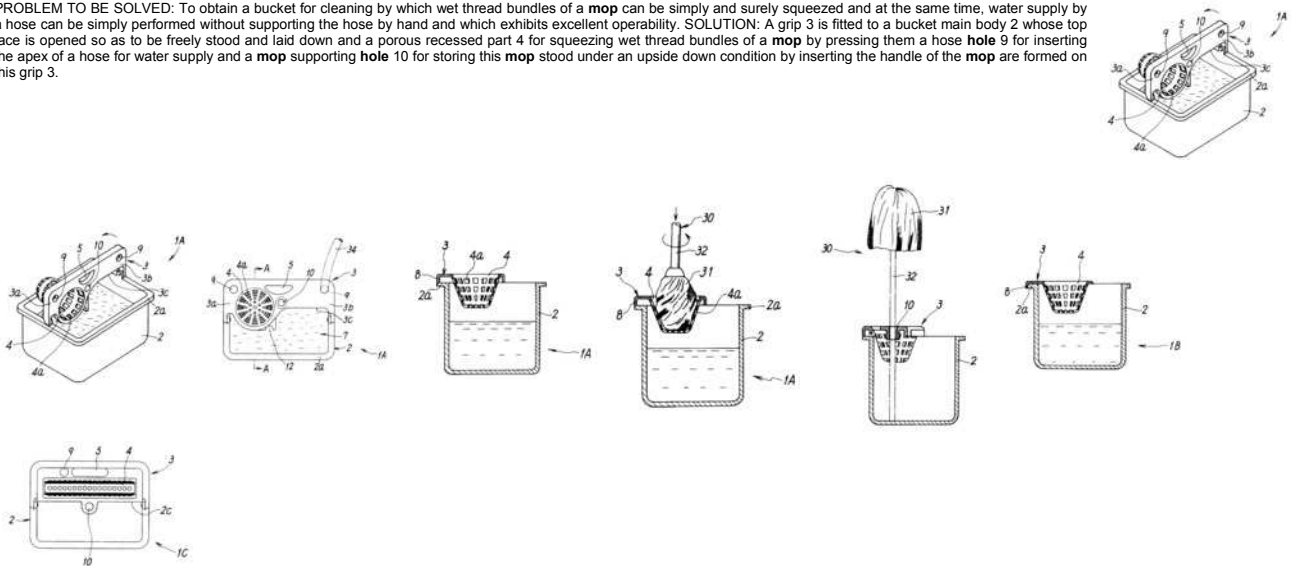
10. **A mop washing machine and the integrated structure of the pulsator with ribs and the water removal barrel thereof** WO02089651 2002-05-08 WANG CHANGAN XU JIHAI* 2002-11-14 2002-11-14

Mop washing machine, which includes housing, driving mechanism, controlling mechanism, pulsator with ribs, water tank, water removal barrel, draining mechanism, and **mop** supporting means, wherein an integrated structure of the pulsator with ribs and the water removal barrel consists of the water removal barrel which is of cylindric without the bottom and the pulsator with ribs which is fixed together with the lower end of the barrel. The **mop** supporting means is a protrusion supporting element which is on the upper end of the center of the pulsator with ribs.



11. **Bucket for cleaning provided with squeezing function for mop** JP2000060785 1998-08-18 AZUMA KOGYO* 2000-02-29 2000-02-29

PROBLEM TO BE SOLVED: To obtain a bucket for cleaning by which wet thread bundles of a **mop** can be simply and surely squeezed and at the same time, water supply by a hose can be simply performed without supporting the hose by hand and which exhibits excellent operability. **SOLUTION:** A grip 3 is fitted to a bucket main body 2 whose top face is opened so as to be freely stood and laid down and a porous recessed part 4 for squeezing wet thread bundles of a **mop** by pressing them a hose **hole** 9 for inserting the apex of a hose for water supply and a **mop** supporting **hole** 10 for storing this **mop** stood under an upside down condition by inserting the handle of the **mop** are formed on this grip 3.



12. Self-rotating mop

CN102525359

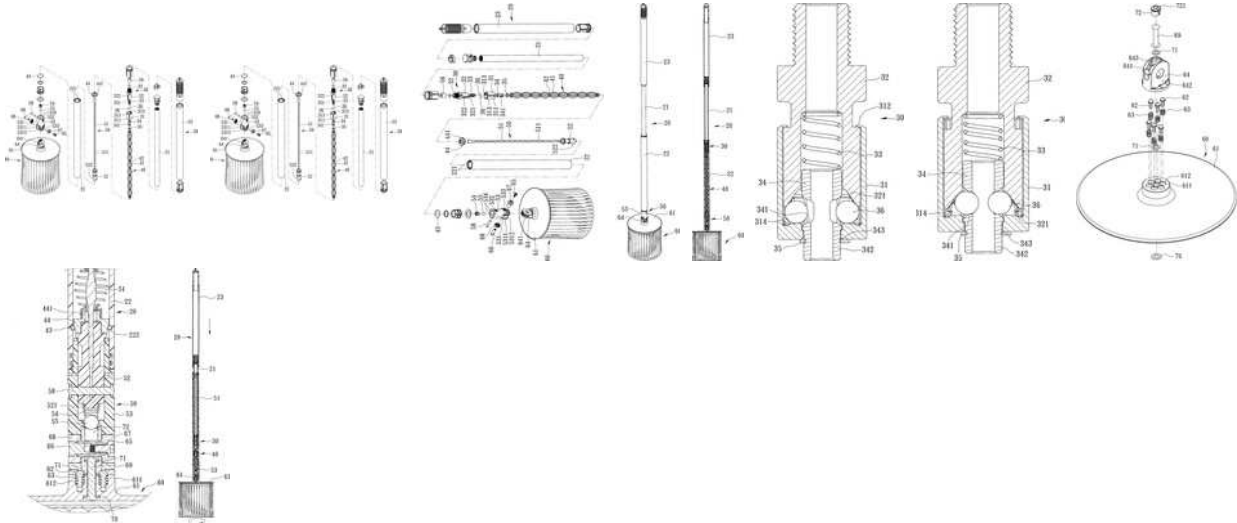
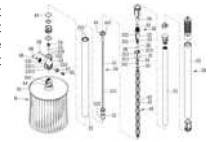
2010-12-10

WATERSON*

2012-07-04

2012-07-04

The invention discloses a self-rotating mop, which comprises a holding rod, a one-way mechanism, an elastic mechanism, a rotating mechanism and a rotating shaft mechanism capable of fixing angles or adjusting angles to rotate in 360 degrees, the one-way mechanism is provided with a hollow sliding sleeve, a stretch fitting, a limit catheter and a pair of steel balls, and the steel balls are compelled to rotate by downwardly pressing the holding rod, thereby achieving the effect of rotating dehydration. The elastic mechanism continuously comprises a plurality of big and small rings, which can be overlapped to reduce noise when being compressed, and the rotating shaft mechanism is elastically provided with a position pin, and can elastically press against and position angles of the holding rod, thereby achieving the effect of convenient use.



13. Electric mop cleaning machine

CN203789859

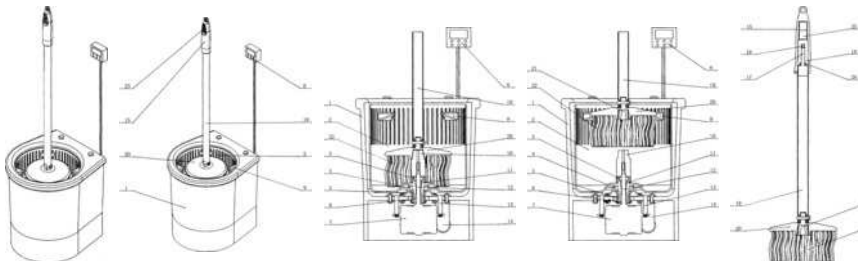
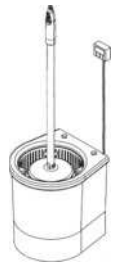
2014-02-24

ZHANG BAOZHONG*

2014-08-27

2014-08-27

The utility model provides an electric mop cleaning machine. The electric mop cleaning machine is characterized in that multiple tray locating frames are respectively arranged on the upper portion inside the circumference of a washing dewatering basket, a connecting sleeve is arranged in the middle of the lower end of the washing dewatering basket, a large shaft sleeve and a large sealing piece are installed in a connecting hole of a fixing connecting piece, the connecting sleeve in the middle of the lower end of the washing dewatering basket penetrates through the large sealing piece and the large shaft sleeve from top to bottom and then is clamped through a snap spring, a one-way bearing, a small shaft sleeve and a small sealing piece are installed in the hole of the connecting sleeve in the middle of the lower end of the washing dewatering basket, a motor shaft penetrates through the one-way bearing, the small shaft sleeve and the small sealing piece in the connecting sleeve in the middle of the lower end of the washing dewatering basket from bottom to top, and at the bottom inside the washing dewatering basket, a washing spline twisting wheel is installed on the exposed portion of the top end of the motor shaft.



14. Cleaning tool

CN107997708

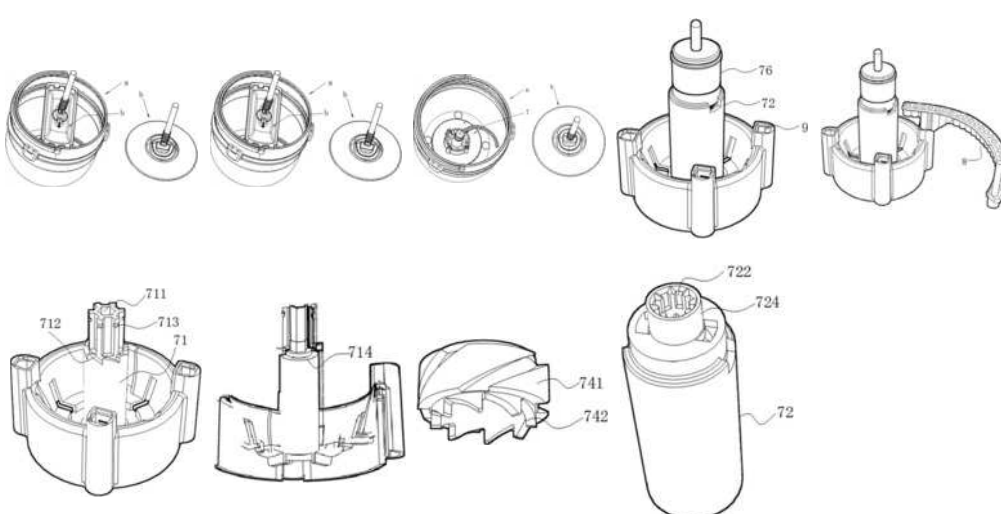
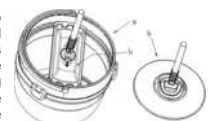
2018-01-08

LI*

2018-05-08

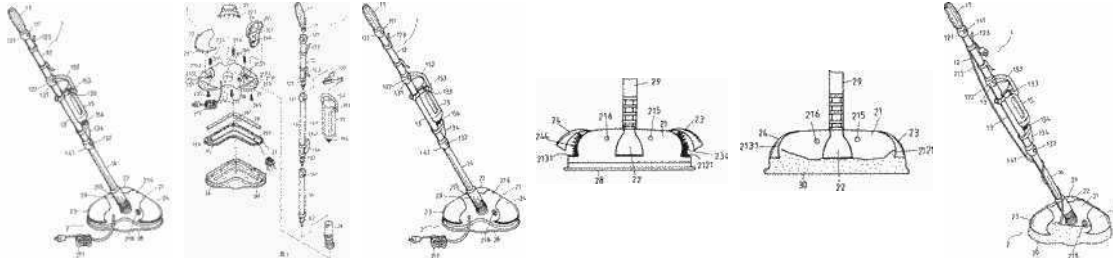
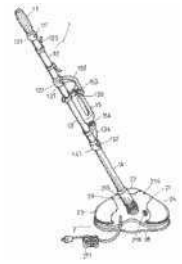
2018-05-08

The invention discloses a cleaning tool. The cleaning tool comprises a mop bucket and a mop. The mop comprises a mop rod, a bottom board and a rotation joint. The mop rod comprises an outer rod body and an inner rod body. The rotation joint comprises a first rotation part and a second rotation part. The bottom of the mop bucket is provided with a lifting mechanism. The lifting mechanism comprises a fixing column fixed at the bottom of the mop bucket, a moving tube and a positioning rod. The moving tube is sheathed outside the fixing column. The positioning rod passes through the moving tube and is inserted in an inserting hole at the center of the fixing column, and the positioning rod is rotated relative to the fixing column. The lifting structure of the cleaning tool is simplified, and the operation is convenient, so the washing and dewatering functions of the mop are combined and coaxially performed, and the volume of the mop bucket can be reduced. The locking structure of the mop rod is simplified, and the angle between the mop rod and a faceplate can be conveniently adjusted and positioned. The locking structure is suitable for the mop or other cleaning tools with the similar demand. In addition, wiping cloth is effectively fixed on a bottom plate of the mop through a fixing claw by the lower faceplate, so the service life of the mop is prolonged.



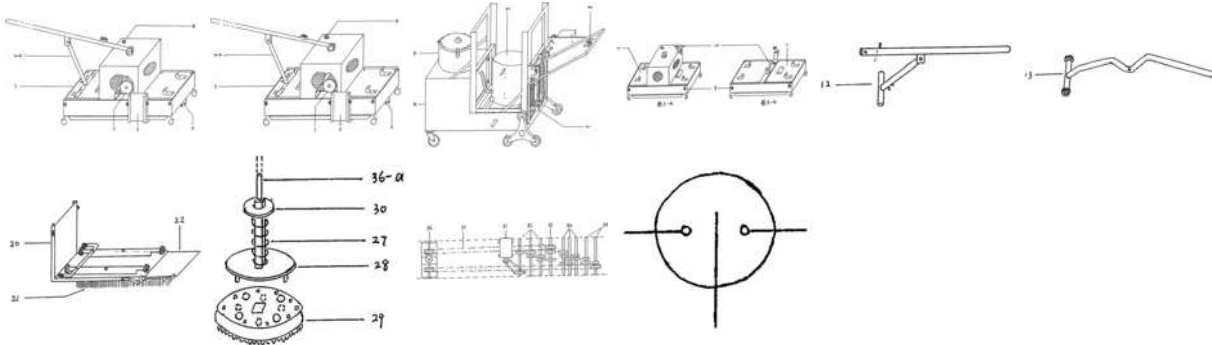
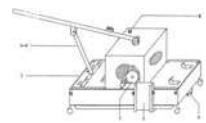
15. Steam type mop structure CN2756150 2004-10-21 TSAI SAM* 2006-02-08 2006-02-08

The utility model relates to a steam type mop structure which is mainly composed of a rod body structure and a base structure, wherein the rod body structure comprises a grip, a hollow first sleeve pipe, a hollow second sleeve pipe, a hollow third sleeve pipe and a water storage barrel, wherein the second sleeve pipe is provided with a fixing ring and a fixing seat for the water storage barrel, so that the water storage barrel can be fastened on the second sleeve pipe; the base structure comprises a three-corner upper cover, a steam chamber base and a supporting seat, wherein a pin-jointed fastening seat which can do pivotal rotation in a proper angle is arranged on the three-corner upper cover in a pin joint mode, and the front end and the edges of the left corner and the right corner of the three-corner upper cover are respectively provided with a proper groove to be provided with corresponding to springs in a pin joint mode and be clamped to position; the steam chamber base is arranged in the supporting seat, and a control circuit board and an internal liner are hidden in the supporting seat, so that the supporting seat and the three-corner upper cover are combined into the integral base structure, and the pin-jointed fastening seat and the rod body structure are combined into the integral steam type mop structure.



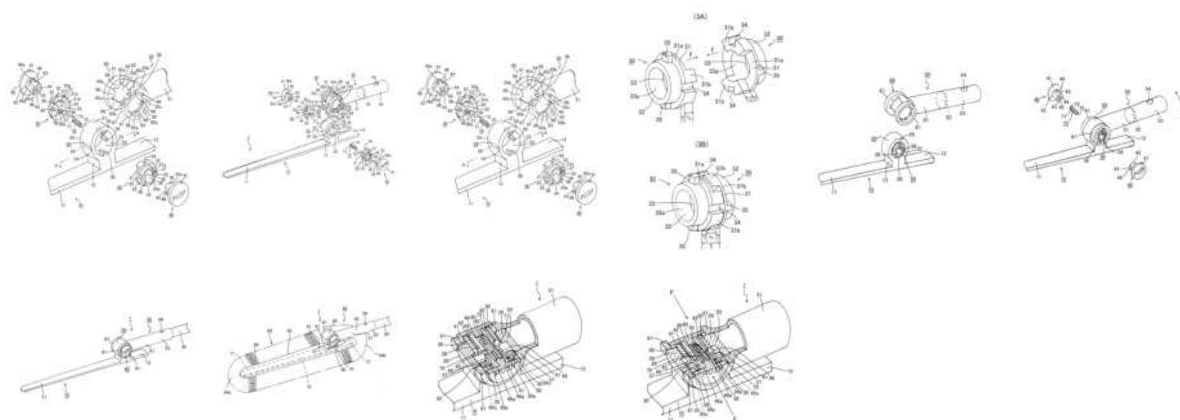
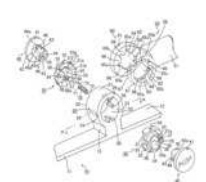
16. Reciprocating multifunctional floor wiping machine CN103948356 2013-11-22 LONG GANGQING 2014-07-30 2014-07-30

The invention relates to a reciprocating multifunctional floor wiping machine, which relates to a mechanical device for wiping smooth and flat floors. The reciprocating multifunctional floor wiping machine can solve the problem that a manpower mop wastes labor force, or the existing floor wiping machine is unreliable in performance and imperfect in functions, and has other design defects. The reciprocating multifunctional floor wiping machine is characterized in that a host machine of the reciprocating multifunctional floor wiping machine is formed by a machine body, a stay bar, a reciprocating wiping device, a rotating cleaning device, a motor power reciprocating transmission device and a switch; an automatic washing and dewatering machine is an auxiliary machine, which is formed by a base, a washing and dewatering barrel part, a lifting and settling barrel part, a motor power transmission device and an automatic washing and dewatering timing switch. The reciprocating multifunctional floor wiping machine is high in practicability, has the advantages that the machine is reliable in performance, perfect in functions, not limited by corridors or floors when being used, good in wiping effect, high in work efficiency, simple in operation, good in quality, low in price, and the like, is the mechanical device for replacing the manpower mop for wiping the floors in public places such as stations, hospitals, hotels, colleges and office buildings, and is also suitable for families.



17. Double sided pushbutton thin width type wiper holder and cleaning tool JP5759645 2015-03-10 DUSKIN* NIFCO* 2015-08-05 2015-08-05

PROBLEM TO BE SOLVED: To provide a wiper holder that is turned in multi-stage by the pressing force of left and right pushbuttons in the thin width type. SOLUTION: A double sided pushbutton thin width type wiper holder 1 of the present invention has a gripper 10 turned in multi-stage, a connection part 50 and a handle 80. A head 20 provided with a rail 26 in the width direction of a head inner circumferential surface 23 is projected to the gripper 10. Two rotary lock members 30 comprising a large diameter projection 31b having a locking groove 34, a large diameter plate 31a and a small diameter disk 32 are disposed to a head through-hole 22 so that the locking groove 34 is fitted in the rail 26 and the large diameter projections 31b are faced to each other. The left and right large diameter projections 31b, 31b of the same amount of projection are fitted alternately and constituted in a thin width. Bearing projections 61, 61 provided with an engaging protrusion 35 in a small diameter disk part and provided with recesses 65a, on the connection part tip are disposed at both ends of the head. The rotary lock member is put into retaining restriction from the head through-hole, and the pushbutton 40 is inserted outside the bearing projection. The engaging protrusion is disengaged and engaged from the recess by the pressing force and projection of the pushbutton, and thereby the turning is enabled or prohibited. SELECTED DRAWING: Figure 2



18. Water spraying scrape

CN201239097

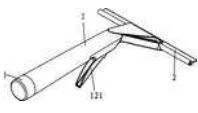
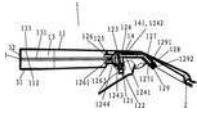
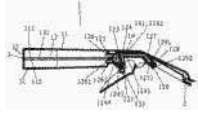
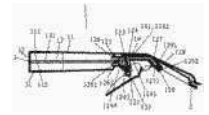
2008-07-14

MINGYUAN HARDWARE PLASTIC FACTORY*

2009-05-20

2009-05-20

The utility model discloses a spray wiper which comprises a wiper body, a wiping piece and a bottom cover, wherein the wiper body is internally provided with an injection cavity body and a water discharging control mechanism. The water discharging control mechanism comprises a pressing handle, an air valve, a spring, a main control valve, a waterproof **retainer** ring, a wave bead **holder**, wave beads, a bent pipe, an air sealing valve and an outlet valve, wherein the main control valve is provided with a groove and an incline and is fixed in the wiper body through the groove and the incline, the main control valve is also provided with an accommodation **hole**, the air valve is arranged in the accommodation **hole** on the main control valve, the spring is arranged in the air valve, the pressing handle is arranged on the air valve and is connected with the air valve, the main control valve is internally provided with the wave bead **holder**, the bent pipe is connected with the main control valve, the outlet valve is fixed on the bent pipe, and the main control valve is provided with water outlets. The spray wiper with cleaning solution can spray water or the cleaning solution on the surface needing to be cleaned when being used for cleaning the glass or the wall, and then can be used for cleaning by the wiping piece with very convenient use.



19. Open type water tank cleaning machine

CN203670290

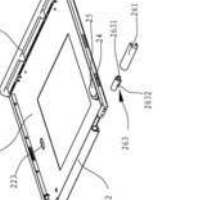
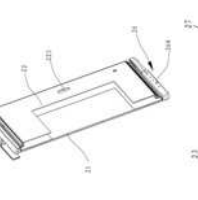
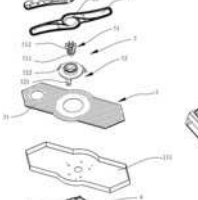
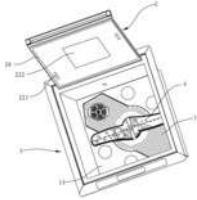
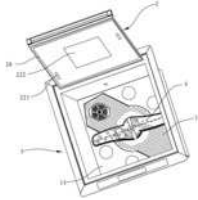
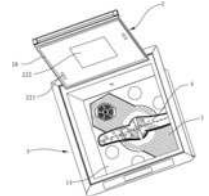
2013-12-31

NINGBO FOTILE KITCHEN WARE*

2014-06-25

2014-06-25

The invention discloses an open type water tank cleaning machine which comprises a box forming a washing space. The box comprises a water tank body and is characterized in that a water pump is disposed at the bottom of the water tank body. The water pump comprises an impeller disposed in a water outlet part. A flow guide support for supporting the water outlet part is disposed below the water outlet part. The lower portion of the impeller is accommodated in a lower accommodating cavity formed in the center of the flow guide support. A plurality of mounting support legs extending longitudinally are disposed on the periphery of the flow guide support, so that the flow guide support is disposed at the bottom of the water tank body in a suspended manner. Due to the fact that the suspension support is disposed in a suspended manner, the water inlets of the water pump accommodated in the flow guide support are distributed in the lateral surfaces of the flow guide support, water replenishing can be performed timely, and good water drawing effect is achieved. Due to the fact that a flow guide surface is disposed at the bottom of the flow guide support, water on the lateral sides of the flow guide support can be guided into the water pump, the noise of the impeller is lowered, water flow is accelerated, and the water drawing effect is further increased.



20. Cleaning pad

WO2015073429

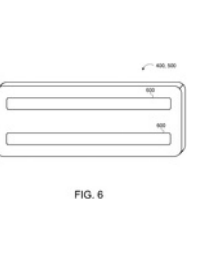
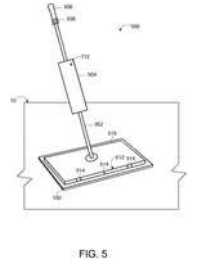
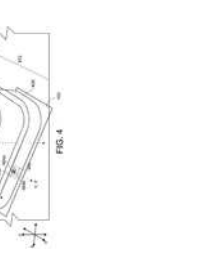
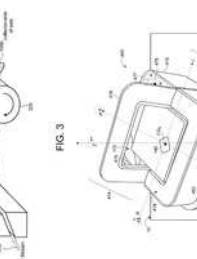
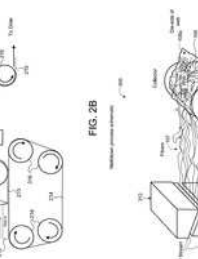
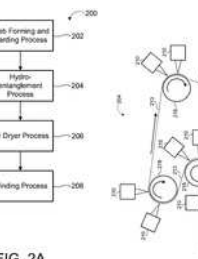
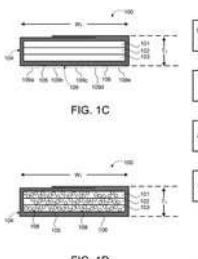
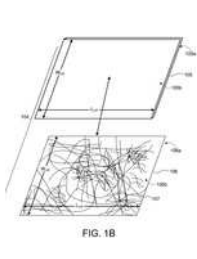
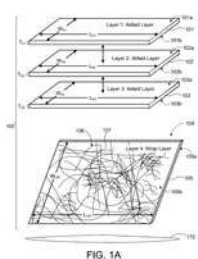
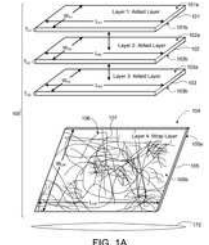
2014-11-11

I ROBOT
IROBOT*
US IROBOT

2015-05-21

2015-05-21

A pad particularly adapted for surface cleaning. The pad includes an absorbent core having the ability to absorb and retain liquid material, and a liner layer in contact with and covering at least one side of the absorbent core. The liner layer has the ability to retain and wick liquid material through the liner layer. Cleaning apparatus containing such pads and methods of using such pads are also described.



21. Cleaning system

AU2609384

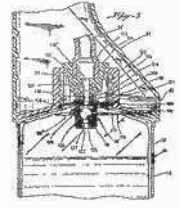
1983-03-24

KIMBERLY CLARK WORLDWIDE*
SANI FRESH INTERNATIONAL
SCOTT PAPER*

1984-09-27

1984-09-27

A cleaning fluid cartridge (84), adapted for use with a cleaning system (80) having a handle (81) and a cleaning brush (85) attached thereto, wherein a flexible bag (115) contains the cleaning fluid, and a check valve (98) is sealingly disposed within an opening in the flexible bag (115).



22. Anti-falling structure and drainage basket with same

CN203138414

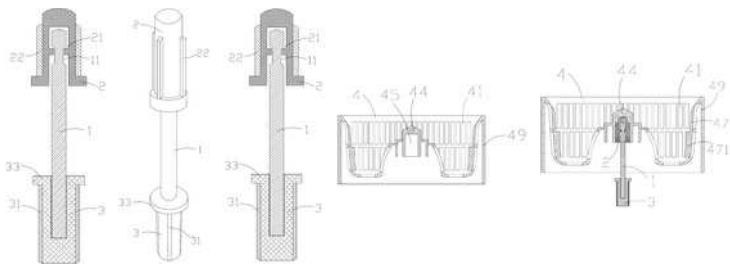
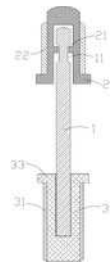
2013-02-05

Lin Hui;TONG YIKANG

2013-08-21

2013-08-21

The utility model discloses an anti-falling structure and a drainage basket with the same. The anti-falling structure comprises a fulcrum shaft which is matched with a basket body in a rotatable mode. A plastic abrasion-resistant sleeve is in rotatable connection to the upper end of the fulcrum shaft, the fulcrum shaft is matched with the plastic abrasion-resistant sleeve in an anti-falling mode, and the plastic abrasion-resistant sleeve is detachably connected with the basket body. According to the anti-falling structure and the drainage basket with the same, the structure is simple, parts are few, costs are low, the service life is long, and the rotation flexibility between the drainage basket and the fulcrum shaft is guaranteed while the drainage basket can be effectively prevented from falling off.



23. Cleaning device with a squirter

CN1704010

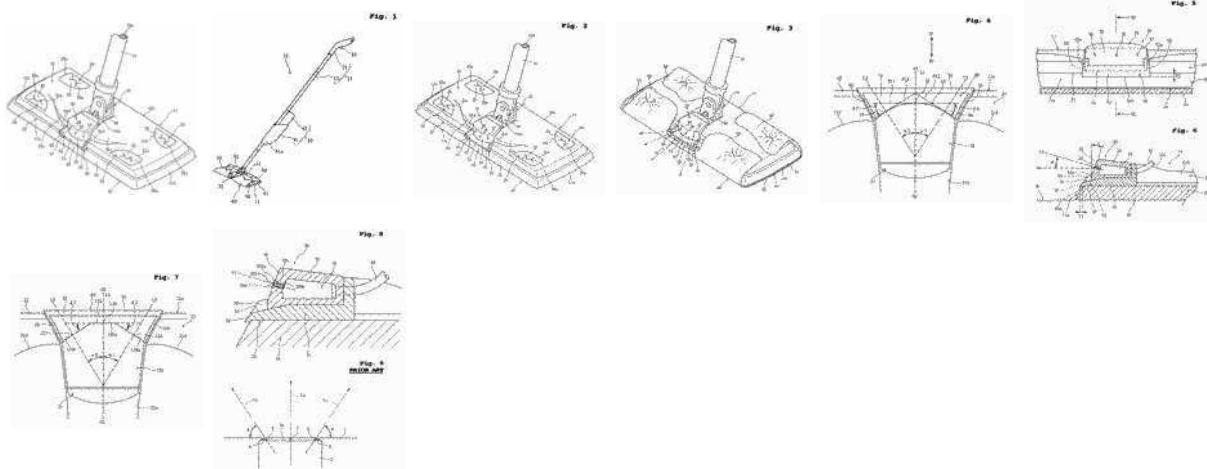
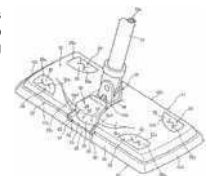
2004-06-03

UNICHARM*

2005-12-07

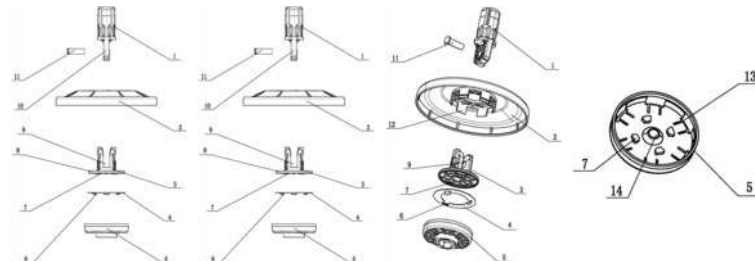
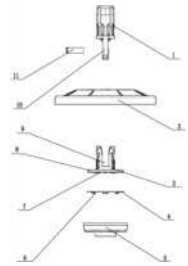
2005-12-07

Disclosed is a cleaning device with a squirter for squirting liquid forward of a cleaning head (11). The cleaning head (11) has a nozzle head (32) whose squirt surface (33) is curved. In the nozzle head (32), squirt directions (L1,L2,L3) of nozzles (35,36,37), which are arranged to fan out at a squirt angle ($\pm 1, \pm 2$), are substantially perpendicular to tangents (PL1,PL2,PL3) to the squirt surface (33). Therefore, liquid squirted from the nozzles (35,36,37) tends to fly straight along the squirt directions (L1,L2,L3) without being drawn to the squirt surface (33).



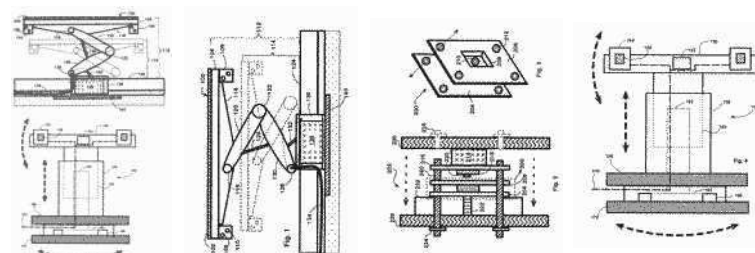
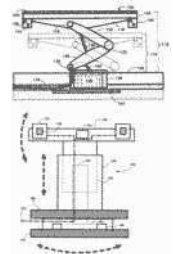
24. Multifunctional water-removing machine CN108095649 2016-11-25 XINCHANG COUNTY ZHICHANG TECHNOLOGY* 2018-06-01 2018-06-01

The invention discloses a multifunctional water-removing machine, and belongs to the field of daily articles. The multifunctional water-removing machine comprises a rotary plate, two towbars and a connecting piece; the connecting piece comprises a towbar connecting head for connecting the towbars, a rotary plate buckle and a rotary plate limiting part; a central through hole is formed in the rotary plate; an annular turning edge is arranged at the bottom of the rotary plate limiting part; the rotary plate limiting part is arranged in the central through hole of the rotary plate in a penetration manner to prop against the bottom surface of the rotary plate through the annular turning edge; the upper end of the rotary plate limiting part is connected with the towbar connecting head; a plurality of buckles are arranged at the bottom of the rotary plate; embedded grooves matched with the buckles are formed in the rotary plate buckle; the rotary plate is connected with the rotary plate buckle through the buckles and the embedded grooves; an elastic part is arranged between the top surface of the rotary plate buckle and the bottom surface of the rotary plate limiting part, and convex parts which are matched and contacted mutually are arranged on the top surface of the rotary plate buckle and the bottom surface of the rotary plate limiting part. The towbars disclosed in the invention can drive the rotary plate to rotate synchronously, so that it is ensured that the rotary plate is not sliding.



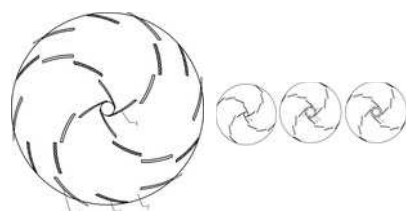
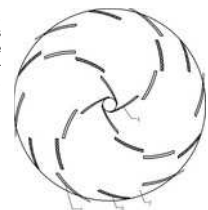
25. Multifunctional pods US20060146445 2005-01-04 EVAULT MAXTOR OPTIMUS LAJSENSING OPTIMUS LICENSING* OPTIMUS SERVICES OPTIMUS SERVICES REABILITY OPTIMUS SERVISIZ EHLEHLSI SEAGATE TECHNOLOGY 2006-07-06 2006-07-06

A pod, particularly for indoor use, consisting of a vertically movable bollard adapted to present utilities and optionally provide security function, presented in a watertight or waterproof housing is disclosed. The pod can provide a watertight or waterproof seal in both its distended and retracted state and also provides a substantially flush, cleanable top surface with respect to the surrounding floor, table, or surface when retracted. The pod may optionally be adapted with a universal adaptor for presenting gas and other like utilities. All utilities are sourced from beneath the ground or from a source outside the pod. The pod is powered and may be controlled directly on the bollard or distant to the bollard by a wired or wireless connection thereto. Finally, the pod may be placed in a floor, table, or other structure as a single stand-alone unit and may work in conjunction with other pods.



26. Brush disc for cleaning robot CN103549920 2013-11-06 ZHANG ZHOUXIN 2014-02-05 2014-02-05

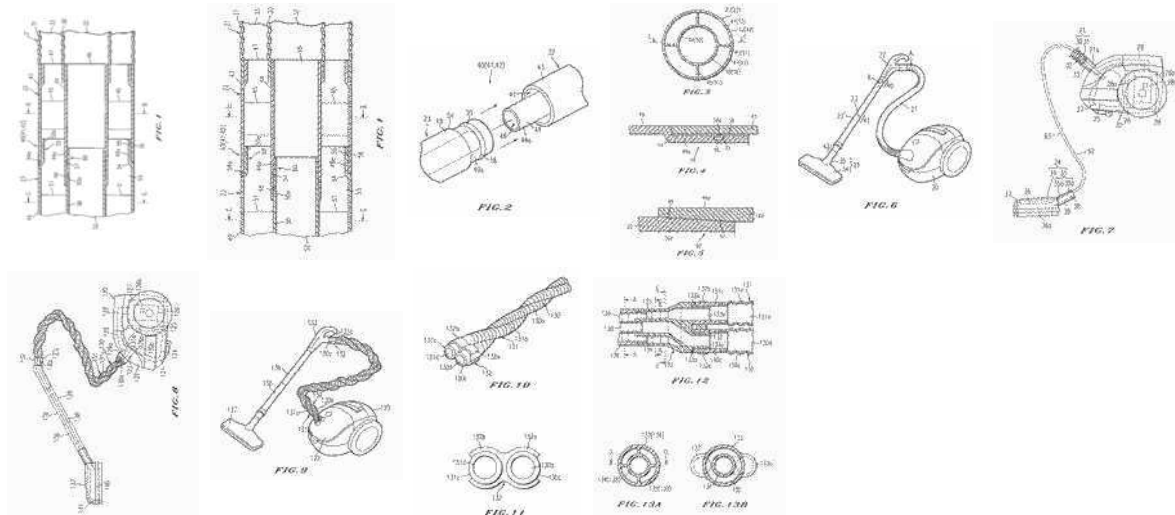
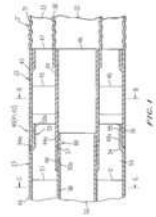
A brush disc is arranged at the bottom of a cleaning robot downwards. A plurality of curvy disc spokes are radially arranged on the brush disc in an annular distribution way, each disc spoke can be continuous as well as intermittent, bristles and at least one of brush pieces and brush strips are arranged on each disc spoke downwards, and bristles and at least one of brush pieces and the brush strips are arranged on the outer side of the brush disc obliquely downwards. When the brush disc rotates, the bristles or the brush pieces or the brush strips rotate in a centripetal way. A suction opening is in the center of the brush disc or close to the center of the brush disc and is annular, strip-shaped or round. The bristles and the brush pieces or the brush strips are alternately arranged, garbage or dirt water is pushed to the suction opening position through rotating, and the rotating speed arrangement of the brush disc does not exceed 300 turns per minute.



27. Vacuum-cleaner JPH11178752 1997-12-24 TOSHIBA TEC* 1999-07-06 1999-07-06

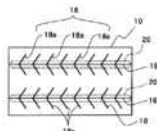
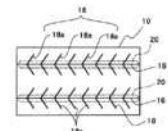
Disclosed is a vacuum cleaner in which a suction side 28a of an electric fan 28 contained in a cleaner main body 20 is connected to a suction port body 24 via a suction air passage 61 and an exhaust side 28b of the electric fan 28 is connected to the suction port body 24 via an exhaust air passage 62, characterized in that an air passage connecting portions 40, 41 and 42 for removably connecting the suction port body 24 to the cleaner main body 20 is provided on the way of the both air passages 61 and 62.

<IMAGE>



28. Wiping cloth and related technique therefor JP2001286424 2000-04-06 YAMAZAKI* 2001-10-16 2001-10-16

PROBLEM TO BE SOLVED: To efficiently prevent the separation of the dusts collected in the portion covering the edges of the wiping cloth which covers the wiping surface of a base body and holds the edges such that it covers them as folded, thereby improving the efficiency of wiping. SOLUTION: Two linear compressed **concave** lines 16 for positioning are provided in parallel to the longer sides of the nonwoven wiping cloth 10. Two sets of rows of cuts 18 made of V-shaped cuts 18a are provided such that the folding points of the V-shaped cuts 18a or the axial lines of symmetry are positioned on the compressed **concave** lines.



29. Cleaning implement KR20020007187 2001-07-12 KIUE KEIICHIRO 2002-01-26 2002-01-26

PROBLEM TO BE SOLVED: To provide a cleaning implement allowing efficient cleaning work with smooth and positive cleaning of a floor face behind a toilet bowl, its lower part and other narrow spaces in an easy posture. SOLUTION: In this cleaning implement provided with a cleaning implement body 1 and a handle 11, a horizontal part 13 extending almost perpendicularly to the upper part 12 of the handle 11 is formed at the lower part of the handle 11, and the cleaning implement body 1 is fitted to the horizontal part 13 of the handle 11 in a horizontally rotatable state and provided with a fixing means allowing the rotation of the cleaning implement body 1 from the orthogonal state to the horizontal part 13 of the handle 11, viewing vertically from above. Each part of the handle 11 is formed in pipe form to allow air to pass through from the lower face of the cleaning implement body 1 to the upper part of the handle 11. With this constitution, the cleaning implement can also be used as a vacuum cleaner by connecting a communicating **hole** of a conventional vacuum cleaner to the tip of the upper part 12 of the handle 11.

