

Title (en)

Apparatus with removable container for cleaning machine.

Title (de)

Vorrichtung mit abnehmbarem Behälter für Reinigungsgerät.

Title (fr)

Dispositif avec un réservoir amovible pour machine de nettoyage.

Publication

EP 0404279 B1 19950215 (EN)

Application

EP 90202187 A 19841102

Priority

- EP 84904255 A 19841102
- US 58554784 A 19840302
- US 58560984 A 19840302
- US 58587384 A 19840302

Abstract (en)

[origin: WO8503853A1] A machine for cleaning surfaces such as carpets, floors, and the like, has a frame (30) on which is mounted an upper housing (56) containing an air pump (62). An assembly of a fresh liquid container (48) stacked on a waste liquid container (50) is removably mounted on the frame with the aid of a cam latch (54). The air pump communicates with a housing (160) which provides pressurized air to outlets (158, 166 and 168) and suction to a suction nozzle (46) through a conduit (173) which carries waste liquid and air picked up from the carpet to a separator (58) in the housing (56). A cleaning fluid container (64) is removably mounted in a docking port (68) in the housing (56) and aligned and locked in communication with couplings (254) in the docking port (68) by a rotatable collar (66) having a camming recess (220). The clean liquid container (48) and the cleaning fluid container are pressurized by connections thereto from the air pump outlets (166 and 168) to provide for the delivery of fresh liquid or cleaning solution mixtures of selected concentration to a spray nozzle (42) to which pressurized air is also applied from one of the pressurized air outlets (164) via a conduit (158). The delivery and concentration of the fresh liquid and/or cleaning fluid is controlled by an actuator (40) which operates a rocker arm (102) for constricting tubing associated with a coupling (90, 126) in which the pressurized cleaning fluid and fresh liquid are combined. The suction nozzle has a passage (274, 276) for facilitating flow of air and waste water and making such flow visible. The separator (58) includes a conical shroud (172) which facilitates separation of waste liquid from the air picked up from the surface being cleaned. The assembly of fresh water and waste water tanks (48, 50) has a conduit (181) leading from the bottom of the separator housing (160) through the fresh liquid tank into the waste liquid tank. A keyway (184) on the tanks facilitates their alignment with a member on the frame (30) containing the conduits (158 and 173) for the pressurized air to the spray nozzle and the air and waste liquid from the suction nozzle and which provides a key for alignment of the assembly of containers (48 and 50) on the frame (30). The cleaner may be rolled on wheels (32) by a handle (36) connected to the frame (30).

IPC 1-7

A47L 11/30

IPC 8 full level

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A47L 11/4075 (2013.01); **A47L 11/4083** (2013.01); **A47L 11/4088** (2013.01); **B01F 23/49** (2022.01)

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EP 0174312 A4 19860724; EP 0174312 B1 19910911; EP 0404278 A2 19901227; EP 0404278 A3 19920325; EP 0404278 B1 19950503;
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