

Title (en)

MACHINE FOR CLEANING SURFACES SUCH AS CARPETS, FLOORS AND THE LIKE.

Title (de)

VORRICHTUNG ZUM REINIGEN VON OBERFLÄCHEN WIE TEPPICHE, BÖDEN UND DERGLEICHEN.

Title (fr)

MACHINE DE NETTOYAGE DE SURFACES TELLES QUE DES TAPIS, DES PLANCHERS ET AUTRES.

Publication

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Application

EP 84904255 A 19841102

Priority

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- 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 fresh liquid and 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).

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Citation (search report)

- [A] US 4156952 A 19790605 - LYNCH PATRICK E JR [US]
- [A] DE 1403656 A1 19681205 - HOOVER LTD
- [A] DE 1428383 A1 19690717 - CONS FOODS CORP
- [A] DE 2756672 A1 19790621 - KENNGOTT ROLF
- [A] US 3624861 A 19711207 - FREIHEIT FREDERICK E
- See references of WO 8503853A1

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