

Title (en)

METHOD FOR OPTIMIZING OF A VEHICLE FOR SEWER CLEANING AND A VEHICLE FOR SEWER CLEANING

Title (de)

VERFAHREN ZUR OPTIMIERUNG EINES FAHRZEUGS FÜR KANALREINIGUNG UND FAHRZEUG FÜR KANALREINIGUNG

Title (fr)

PROCEDE D'OPTIMISATION D'UN VEHICULE DE CURAGE D'EGOUTS ET VEHICULE DE CURAGE D'EGOUTS

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2007101437A1] The present invention relates to a method of weight, volume and capacity improvement of vehicles, including combined high-pressure washer and gully emptying vehicles provided with a tank (1) for flushing liquid and sludge collection, including where these materials are separated by a piston (10) and that the vehicle is provided with at least one hose reel (18) for pressure- or suction hoses. The invention includes optimization of a vehicle's tank capacity as a function of the total height of the vehicle, by use of a canted or curved slit (4A) for controlling an opening-type rear cover (2) to the tank. Furthermore, the invention includes optimization of the piston weight through use of linear actuators such as hydraulic cylinders (12) for controlling the piston movement, and optimized suspension of tanks (1) with use of clamps (14) fastened on aluminum bases (13). The invention also includes weight, volume and strength optimized hose reels (18), where the reeling drums (24, 25) are suspended in a single load- carrying bearing (22) and where the reeler is rotated by use of a gear rim (23) with internal toothing (21), which is driven by the gear wheel (20) on a built-in motor (19). The invention makes it possible to manufacture combined high-pressure washer and gully emptying vehicles with external measurements, which match and fit standard cargo containers for inexpensive overseas transportation, and the tank capacity of the vehicles can be improved with more than 35% in relation to the total weight of the vehicle.

IPC 8 full level

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Citation (search report)

- [Y] US 4525277 A 19850625 - POULIN MAURICE [CA]
- [Y] EP 0728891 A1 19960828 - MOULINEX SA [FR]
- [A] DE 10246041 A1 20040422 - MUELLER UMWELTTECHNIK [DE]
- [A] FR 2840234 A1 20031205 - RIVARD SA [FR]
- [A] US 4922571 A 19900508 - DRIEAR JOSEPH R [US]
- See references of WO 2007101437A1

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