

Title (en)

Assembly for pumping washing liquid from a tank to a spray nozzle of a motorvehicle

Title (de)

Aggregat zum Fördern von Waschflüssigkeit aus einem Vorratstank zu einer auf eine Scheibe eines Kraftfahrzeuges gerichteten Waschdüse

Title (fr)

Ensemble de pompage de liquide de lavage d'un réservoir à un gicleur de véhicule automobile

Publication

EP 0610572 B1 19970312 (DE)

Application

EP 93119909 A 19931210

Priority

DE 4300407 A 19930109

Abstract (en)

[origin: JPH06227370A] PURPOSE: To increase a carrier pressure and to speedily wash a glass pane with a little quantity of washing liquids. CONSTITUTION: Concerning the device for transporting the washing liquid from a storage tank 10 to a wash nozzle 42 toward the glass pane of a motor vehicle, a front carrier pump 34 constituted as a turbo type pump is arranged on the upstream side of a carrier pump 24 in the view of flowing directions 70, 72, 74 and 76 of washing liquids, a transporting member 32 of the front carrier pump 24 is rotated in a front pump chamber 36, and the front pump chamber 36 is connected through an overflow passage 64 to a pump chamber 22 of the carrier pump 24.

IPC 1-7

F04D 1/06; F04D 29/18; F04D 29/44

IPC 8 full level

B60S 1/48 (2006.01); **F04D 1/06** (2006.01); **F04D 29/18** (2006.01); **F04D 29/44** (2006.01)

CPC (source: EP)

F04D 1/063 (2013.01); **F04D 29/185** (2013.01); **F04D 29/448** (2013.01)

Cited by

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CH DE ES FR IT LI

DOCDB simple family (publication)

DE 4300407 A1 19940714; DE 59305771 D1 19970417; EP 0610572 A1 19940817; EP 0610572 B1 19970312; ES 2099358 T3 19970516; JP H06227370 A 19940816

DOCDB simple family (application)

DE 4300407 A 19930109; DE 59305771 T 19931210; EP 93119909 A 19931210; ES 93119909 T 19931210; JP 33706693 A 19931228