

Title (en)  
CLEANING DEVICE WITH FOIL VALVE

Title (de)  
REINIGUNGSVORRICHTUNG MIT FOLIENVENTIL

Title (fr)  
DISPOSITIF DE NETTOYAGE AVEC VALVE A FEUILLE

Publication  
**EP 0738358 A1 19961023 (DE)**

Application  
**EP 94927638 A 19940920**

Priority  

- DE 4400766 A 19940113
- EP 9403161 W 19940920

Abstract (en)  
[origin: WO9519473A1] The invention relates to a cleaning device with a container (10) for a cleaning agent (12) which can be set to an operative position in the cistern (14) to clean a WC cistern (14) and a WC pan and has at least one lower outlet (16) from which a partial quantity (18) of the liquid containing the cleaning agent (12) held in the container (10) flows during the flushing operation. The outlet (16) is beneath the surface (20) of the flushing water and can be closed off by a gas bubble (26). The fact that there is at least one valve (28) to control the outlet (16), which closes the outlet (16) under the effect of the gas bubble (26) when the water in the cistern (14) rises and frees it during flushing to provide a metered quantity of the cleaning agent (12), provides a cleaning device which operates reliably regardless of the nature of the cleaning agent to be used and, in particular, ensures the uniform release of cleaning agent.

IPC 1-7  
**E03D 9/02**

IPC 8 full level  
**E03D 9/02** (2006.01); **E03D 9/03** (2006.01)

CPC (source: EP)  
**E03D 9/038** (2013.01); **E03D 2009/024** (2013.01)

Citation (search report)  
See references of WO 9519473A1

Citation (examination)  

- EP-A- 0 114 428
- DE-A- 2 916 247
- US-A- 3 023 426
- US-A- 3 698 021
- US-A- 4 707 865
- US-A- 4 709 424

Cited by  
US8032953B2

Designated contracting state (EPC)  
AT BE CH DE ES FR IT LI NL PT

DOCDB simple family (publication)  
**WO 9519473 A1 19950720**; AT E155189 T1 19970715; DE 4400766 A1 19950720; DE 59403332 D1 19970814; EP 0738358 A1 19961023;  
EP 0738358 B1 19970709

DOCDB simple family (application)  
**EP 9403161 W 19940920**; AT 94927638 T 19940920; DE 4400766 A 19940113; DE 59403332 T 19940920; EP 94927638 A 19940920