

Title (en)  
Cleaning and freshening unit intended for suspension from a rim of a toilet bowl

Title (de)  
Reinigungs- und Erfrischungsvorrichtung zum Einhängen am Rand eines Toilettenbeckens

Title (fr)  
Dispositif de nettoyage et de rafraîchissement destiné à être accroché sous le rebord d'une cuvette de W.C.

Publication  
**EP 0785315 A1 19970723 (EN)**

Application  
**EP 96203280 A 19961121**

Priority  
NL 1001722 A 19951122

Abstract (en)  
A cleaning and freshening unit (1) provided with a holder (2) and a liquid reservoir (4) detachably connected to the holder (2), the unit being provided with means (5) for suspension from a rim of a toilet bowl, the unit (1) also being provided with a porous, liquid-absorbing mass (6) which always communicates with liquid (F) contained in the liquid reservoir (4), the holder (2) being provided with a connecting nipple (7) suitable for connection to a discharge opening (8) of the bottle (3), the discharge opening (8) of the bottle (3) when connected being partly closed by a closing wall (9) provided with at least one liquid passage opening (10) which opens into an inlet (11<a>) of a channel (11) abutting with an outlet (11<b>) having a limited surface against the porous mass (6), and provided with at least one air supply opening (12) communicating with the ambient pressure, the sizes of the liquid passage opening (10) and the air supply opening (12) being such that the liquid pressure on the porous mass (6) is always equal and independent of the liquid level in the liquid reservoir (4). <IMAGE>

IPC 1-7  
**E03D 9/03**

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

CPC (source: EP)  
**E03D 9/032** (2013.01)

Citation (applicant)  
EP 0538957 A1 19930428 - SARA LEE DE NV [NL]

Citation (search report)  
• [YDA] EP 0538957 A1 19930428 - SARA LEE DE NV [NL]  
• [Y] US 5409135 A 19950425 - CAMPAU DANIEL N [US]  
• [YA] US 4916760 A 19900417 - SHAHAR ARIE [US]  
• [A] EP 0570326 A1 19931118 - FLOW RITE CONTROL LTD [US]

Cited by  
NL1018656C2; WO0065162A1; WO0032883A1; NL1016631C2; FR2813330A1; US6434758B2; WO9966140A1; WO0104428A1; EP2116656A1; EP2123833A1; EP1936049A2; EP1936050A2; EP1936051A2; DE10204928B4; DE19855304A1; DE19944318A1; DE10164866B4; NL1016645C2; DE10057300A1; DE10057300C2; EP1260577A3; AU768678B2; AU775705B2; CN100357535C; GB2368576A; GB2367567A; EP1182303A1; FR2813331A1; BG64801B1; DE10057312A1; DE10057312C2; DE10057317A1; DE10057317C2; DE19912217A1; DE19912217C2; GB2338495A; GB2338495B; AU753432B2; GB2338496A; GB2338496B; EP1752590A3; EP1046755A1; US6230334B1; AU772032B2; KR20000071692A; US6651261B1; FR2809122A1; US6505356B1; GB2370289A; GB2370289B; US7013498B1; GB2361250A; GB2361250B; EP1433905A1; EP1435415A1; EP1449970A1; EP1336693A3; JP2016223169A; WO0132995A1; WO0042261A1; US6934973B2; EP1203844A1; EP1978168A1; US6976277B2; WO02064109A2; US6817040B2; FR2841577A1; US6898806B2; WO0240792A1; WO0102653A1; WO9966139A1; EP1334243B1; US6662380B1; US6854136B2; US7234175B2; US6928667B2; WO2019174713A1; WO0240790A1; US8316471B2; WO2010018005A1; DE102008037724A1; WO2004013419A1; US8646118B2; WO2021098950A1; WO02064898A1; WO0177451A1; US6412120B1; US6178564B1; KR20180120426A; WO0106067A3; EP1391563A2; US6698034B1; WO03027405A1; US6691329B2; WO0144590A1; US6675396B2; EP2431543A1; WO0240791A1; EP1026331A1; WO2004097124A1; US7114199B2; WO0240788A1; WO0240789A1; US6389610B1; US6591431B2; EP2230358A2; EP1336693B2; EP1433905B2

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

DOCDB simple family (publication)  
**EP 0785315 A1 19970723; EP 0785315 B1 20000628**; AT E194186 T1 20000715; AU 711453 B2 19991014; AU 711453 C 20040108; AU 7400796 A 19970529; DE 69609046 D1 20000803; DE 69609046 T2 20001026; DE 785315 T1 19990520; ES 2142777 T1 20000501; ES 2142777 T3 20001201; NL 1001722 C2 19970523; NZ 299791 A 19980826; PT 785315 E 20001031; SG 47196 A1 19980320; TW 314563 B 19970901; ZA 969755 B 19970623

DOCDB simple family (application)  
**EP 96203280 A 19961121**; AT 96203280 T 19961121; AU 7400796 A 19961121; DE 69609046 T 19961121; DE 96203280 T 19961121; ES 96203280 T 19961121; NL 1001722 A 19951122; NZ 29979196 A 19961120; PT 96203280 T 19961121; SG 1996011356 A 19961121; TW 85114317 A 19961121; ZA 969755 A 19961121