

Title (en)

Release device for releasing fluid agents

Title (de)

Abgabevorrichtung zur Abgabe von Wirkstofffluiden

Title (fr)

Dispositif de distribution de substances actives liquides

Publication

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Application

EP 08006902 A 20011109

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- EP 01996653 A 20011109
- DE 10057325 A 20001117
- DE 10113036 A 20010317
- DE 20113329 U 20010817
- DE 20116295 U 20011004
- DE 20116963 U 20011016

Abstract (en)

[origin: WO0240787A1] The invention relates to a distributing device for distributing fluids containing active ingredients to the flush liquid in a toilet bowl. The device comprises a holder (1) that can be suspended from the edge of the toilet bowl and at least two separate storage containers (2, 3) for a fluid containing active ingredients that are arranged in the holder (1), wherein each storage container (2, 3) has its own outlet (4) by means of which the respective fluid containing active ingredients is distributed to the flush liquid. In order to optimize the possibility to control the distribution of the fluids containing active ingredients in existing distribution devices, the storage containers (2, 3) are protected in such a way that no flush liquid can enter inside said containers. The outlets (4) of the storage containers (2, 3) are arranged in such a way that only the fluid containing the active ingredients can come out. A partial amount of fluid containing active ingredients is distributed from each storage container (2, 3) to the flush liquid each time the toilet is flushed.

IPC 8 full level

E03D 9/03 (2006.01)

CPC (source: EP)

E03D 9/032 (2013.01)

Citation (search report)

- [YD] WO 9220876 A1 19921126 - BROOKLINE ALPHA LIMITED [GB]
- [YD] WO 9966140 A1 19991223 - JOHNSON & SON INC S C [US], et al
- [AD] EP 0960984 A2 19991201 - BUCK CHEMIE GMBH [DE]
- [A] EP 0940509 A2 19990908 - BUCK CHEMIE GMBH [DE]
- [A] US 3946448 A 19760330 - SIOUFY TAMIM EL
- [AD] EP 1026331 A1 20000809 - GEORG MENSHEN GMBH & CO KG [DE]

Cited by

WO2010018006A1; US8181282B2; US9366016B2; US9422702B2; US9546477B2; US10196803B2; US10669704B2

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