

Title (en)

DEVICE FOR INTRODUCING ACTIVE SUBSTANCES INTO THE FLUSHING WATER, ESPECIALLY IN TOILET PANS

Title (de)

VORRICHTUNG ZUR ABGABE VON WIRKSTOFFEN IN DAS SPÜLWASSER, INSBESONDERE IN TOILETTENBECKEN

Title (fr)

DISPOSITIF POUR LA LIBERATION D'AGENTS DANS L'EAU DE RIN AGE, EN PARTICULIER DANS DES CUVETTES DE TOILETTES

Publication

EP 1141493 A1 20011010 (DE)

Application

EP 99967944 A 19991215

Priority

- DE 19900821 A 19990112
- EP 9909973 W 19991215
- US 58394800 A 20000531

Abstract (en)

[origin: US2003070213A1] The invention concerns a device to dispense active substances into rinse water, especially in toilet bowls, with a container for the active substance, wherein the container has an opening that connects with an essentially plate-shaped distributor, and with a device to hold the distributor on or close to the toilet bowl wall. The distributor consists of two essentially plate-shaped elements. There are intersecting grooves, channels or the like between the plate-shaped elements, and a first group of grooves runs outward from the distributor while the other second group of grooves only runs within the distributor.

IPC 1-7

E03D 9/03

IPC 8 full level

E03D 9/02 (2006.01); **B01J 4/00** (2006.01); **E03D 9/03** (2006.01)

IPC 8 main group level

E03D (2006.01)

CPC (source: EP US)

E03D 9/032 (2013.01 - EP US)

Citation (search report)

See references of WO 0042261A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

US 2003070213 A1 20030417; **US 6591431 B2 20030715**; AT E236306 T1 20030415; AU 2432100 A 20000801; AU 774557 B2 20040701; BR 9916880 A 20011030; CN 1157517 C 20040714; CN 1330742 A 20020109; DE 19912217 A1 20000713; DE 19912217 C2 20020905; DE 59904887 D1 20030508; DK 1141493 T3 20030721; EP 1141493 A1 20011010; EP 1141493 B1 20030402; EP 1291469 A2 20030312; EP 1291469 A3 20030604; ES 2196920 T3 20031216; ID 29929 A 20011025; JP 2002535514 A 20021022; NO 20013178 D0 20010622; NO 20013178 L 20010622; PL 196083 B1 20071231; PT 1141493 E 20030829; US 6389610 B1 20020521; WO 0042261 A1 20000720; ZA 200105659 B 20021010

DOCDB simple family (application)

US 13832402 A 20020506; AT 99967944 T 19991215; AU 2432100 A 19991215; BR 9916880 A 19991215; CN 99814402 A 19991215; DE 19912217 A 19990318; DE 59904887 T 19991215; DK 99967944 T 19991215; EP 02026378 A 19991215; EP 9909973 W 19991215; EP 99967944 A 19991215; ES 99967944 T 19991215; ID 20011518 A 19991215; JP 2000593811 A 19991215; NO 20013178 A 20010622; PL 34970399 A 19991215; PT 99967944 T 19991215; US 58394800 A 20000531; ZA 200105659 A 20010710