Title (en)

ACTIVE AGENT DISPENSING DEVICE AND METHOD FOR MANUFACTURING AN ACTIVE AGENT DISPENSING DEVICE

Title (de

WIRKSTOFFABGABEVORRICHTUNG UND VERFAHREN ZUR HERSTELLUNG EINER WIRKSTOFFABGABEVORRICHTUNG

Title (fr)

DISPOSITIF DE DISTRIBUTION D'AGENT ACTIF ET PROCÉDÉ DE FABRICATION D'UN DISPOSITIF DE DISTRIBUTION D'AGENT ACTIF

Publication

EP 2620489 B1 20170906 (DE)

Application

EP 12199051 A 20121221

Priority

DE 102012001541 A 20120127

Abstract (en)

[origin: EP2620489A1] The active substance delivery device comprises: a housing (2) having a front side and a back side; a primary chamber (19) for receiving a cleaning composition, a disinfection composition, a water treatment composition and/or an ancient alkene composition, where the primary chamber comprises an inlet opening (7) and an outlet opening; a second chamber (3a), which encloses a gelled perfume so that the second chamber defines an outer surface of the gelled perfume; and a suspension device for fixing the housing at an edge of a toilet bowl. The active substance delivery device comprises: a housing (2) having a front side and a back side; a primary chamber (19) for receiving a cleaning composition, a disinfection composition, a water treatment composition and/or an ancient alkene composition, where the primary chamber comprises an inlet opening (7) and an outlet opening; a second chamber (3a), which encloses a gelled perfume so that the second chamber defines an outer surface of the gelled perfume; and a suspension device for fixing the housing at an edge of a toilet bowl in such a way that the back side is provided in a direction of a stationary wall of the next toilet bowl and the front side is provided in a direction of a central region of the toilet bowl. The inlet opening of the first chamber is located in a path of flushing water. The second chamber is partially located in the path of flushing water. The outer surface of the gelled perfume is partially flooded with a flushing operation. The second chamber is arranged in combination with the gelled perfume so that dimensions of the outer surface substantially remain the same in evaporation and/or drenching. The second chamber is formed so that it is partially surmounted by the edge of the toilet bowl during intended suspension of the active substance delivery device in the toilet bowl. The housing is conically tapered by the central region to which the suspension device is secured to an end region in transverse direction to a hanging up direction defined by the suspension device. The housing at its front and back sides is partially formed in a convex-shaped manner. The second chamber comprises a number of anchoring elements that fix the gelled perfume in an intended anchorage position within the second chamber with respect to a spatial direction. The anchoring elements are spaced apart from each other depending on a viscosity of the gelled perfume and from the edge of the second chamber so that the gelled perfume remains unchanged during the intended suspension in the toilet bowl in its position in the second chamber and a gap-free compound is guaranteed between the edge of the second chamber and the gelled perfume. The anchoring elements: are arranged from each other at a distance (d 4) of 10 mm and at distance (d 3) of 5 mm; and comprise pins protruding from a back side plane of the second chamber. The active substance delivery device further comprises a third chamber (3b), which is identically formed to the second chamber, and includes a filling that is different from the contents of the first and second chambers, and the same gelled perfume. The second and third chambers are arranged at wings, which are spaced from each other along the transverse direction to the hanging up direction defined by the suspension device. The composition and/or the mixture is present in the form of a tablet comprising a cleaning agent compartment with a detergent composition and a chlorine compartment with a chlorine component, separated from the cleaning agent compartment. A part of a surface of the chlorine compartment is uncovered before the intended use of the detergent composition. The tablet is arranged in the primary chamber so that it comprises a barrier layer of the uncovered surface of the chlorine compartment in a direction of a full-surface wall of the first chamber. An independent claim is included for a method for producing an active substance delivery device for a toilet bowl.

IPC 8 full level

C11D 17/00 (2006.01); C11D 3/50 (2006.01); C11D 17/04 (2006.01); E03D 9/03 (2006.01)

CPC (source: EP

C11D 3/50 (2013.01); C11D 17/0056 (2013.01); C11D 17/041 (2013.01); E03D 9/032 (2013.01); E03D 2009/026 (2013.01)

Citation (opposition)

Opponent: Henkel AG & Co. KGaA

- WO 2006013322 A1 20060209 RECKITT BENCKISER INC [US], et al.
- US 2010212074 A1 20100826 BURT DIANE JOYCE [US], et al
- DE 4439677 A1 19960509 HENKEL KGAA [DE]
- US 2009119825 A1 20090514 WILSON BRIAN [GB], et al
- EP 0055100 A1 19820630 JEYES GROUP LTD [GB]
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