

Title (en)

Container for dispensing doses of a treatment liquid.

Title (de)

Behälter zum Dosieren von Behandlungsflüssigkeit.

Title (fr)

Récipient pour distribuer des doses de liquide de traitement.

Publication

**EP 0270409 A1 19880608 (FR)**

Application

**EP 87402465 A 19871102**

Priority

- FR 8615276 A 19861103
- FR 8706965 A 19870519

Abstract (en)

[origin: EP0270409B1] 1. Container for distribution of doses of a treatment liquid (2) comprising a nozzle (10) fitted to the neck (6), the container (1) being designed to function with the neck (6) facing downwards submerging and emerging alternately in a volume of water (15), notable a lavatory cistern (3), the nozzle device (10) being of the type comprised mainly of a transparent partition (11) at a distance from the free edge (7) of the neck (6) thus forming an air compartment (13) and an outlet orifice (12) for the treatment liquid (2), drilled in the partition (11), the nozzle device (10) functioning in the first phase by the build-up of an air overpressure in the container (1) as the level (16) rises in the volume of water (15) above the level of the neck (6), due to the formation in the air compartment (13) of a volume of air separated from the ambient atmosphere by the volume of water (15) then by its compression and finally its expulsion into the container (1) via the outlet orifice (12) and, in the second phase, as the level (16) of the volume of water (15) descends below the level of the neck (6) due to the reduction in the air overpressure and expulsion of the treatment liquid (2) via the outlet orifice (12), resulting from the connection of the compartment (13) with the ambient atmosphere, until the relative pressures in relation to the surface tension of the treatment liquid cut off the treatment liquid (2) flow, characterised by the nozzle device (10) which is fitted with a mechanical, moving, regulation system (17), functioning mainly due to gravity, and whose functions are, on the one hand, to reduce the opening of the passage (23) communicating with a discharge orifice (18) during the second phase of the water level descent (16) and treatment liquid (2) discharge and, on the other hand, to reduce the relative variation in the total weight of the regulation system (17) and the column of treatment liquid (2) it supports, due to the weight of the regulation system (17) itself, this regulation system being used to provide an evenly distributed dose as the container (1) is gradually emptied.

Abstract (fr)

Récipient pour distribuer des doses d'un liquide de traitement (2) comportant un dispositif doseur (10) monté dans le col (6), le récipient (1) étant destiné à fonctionner avec le col (6) dirigé vers le bas successivement immergé et émergé dans une masse d'eau (15). Il est particulièrement destiné à une chasse d'eau (3) de toilette. Le dispositif doseur (10) comporte un organe de régulation (17), mécanique, mobile, fonctionnant essentiellement par gravité, ayant pour fonctions, d'une part, de diminuer l'ouverture d'un passage (23) conduisant à un trou de décharge (18) lors de la seconde phase de descente du niveau d'eau (16) et de décharge du liquide de traitement (2) et, d'autre part, de diminuer la variation relative du poids total de l'organe de régulation (17) et de la colonne de liquide de traitement (2) qu'il supporte, étant donné le poids propre de l'organe de régulation (17), cet organe de régulation (17) ayant pour effet de régulariser les doses distribuées au fur et à mesure que le récipient (1) est vidé.

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**E03D 9/03**

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CPC (source: EP US)

**E03D 9/037** (2013.01 - EP US); **E03D 2009/028** (2013.01 - EP US)

Citation (search report)

- [AD] GB 710796 A 19540616 - JOHANNES PIETER VAN GOUDZWAARD, et al
- [A] US 3895739 A 19750722 - BUCHTEL DEAN H
- [A] FR 1493712 A 19670901
- [AD] GB 2094846 A 19820922 - KUO KWANG SHI
- [A] EP 0141687 A2 19850515 - EPARCO SA [FR]

Cited by

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