

## Title (en)

Feed device for adding a chemical substance to tap water

## Title (de)

Zuführvorrichtung zur Beimischung einer chemischen Substanz zu Leitungswasser

## Title (fr)

Dispositif d'alimentation pour mélanger une substance chimique à l'eau courante

## Publication

**EP 1518607 A1 20050330 (EN)**

## Application

**EP 03021171 A 20030923**

## Priority

EP 03021171 A 20030923

## Abstract (en)

A feed device having a function of sustained release for a mixing solution is provided, which can release the mixing solution in a suitable amount in correspondence with the flow rate of running water to thereby use the mixing solution efficiently without a loss so that the service life and exchange period of a cartridge can be prolonged. <??>The feed device comprises a body (1) having a supply channel (4), a cartridge (10) provided in the body (1) defining in the inside thereof a holding chamber (49) for holding a mixing solution and a dilution chamber (50, 51), and means (40; 42) for rotating the cartridge (10). The dilution chamber is communicated with the supply channel (4) through a sustained release outlet (12), while the dilution chamber is supplied with the mixing solution from the holding chamber (49). Furthermore, the feed device may comprise an inner magnet (52, 53) provided in the cartridge (10) and an outer magnet (55, 56) provided on the body (1). When water passes through the supply channel (4), the mixing solution supplied to the dilution chamber (50) is diluted with the water introduced therein through the sustained release outlet (12) and the mixing solution or diluted mixing solution is stirred by the inner magnet (52, 53) maintained at a standstill as attracted by the outer magnet (55, 56) while the mixing solution diluted to a uniform low concentration is sustainably released from the dilution chamber (50) through the sustained release outlet (12) to the supply channel (4). <IMAGE>

## IPC 1-7

**B05B 1/18**; **E03C 1/046**

## IPC 8 full level

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## Citation (search report)

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- [DX] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 11 28 November 1997 (1997-11-28)
- [DA] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 01 29 January 1999 (1999-01-29)
- [DA] PATENT ABSTRACTS OF JAPAN vol. 018, no. 086 (C - 1165) 14 February 1994 (1994-02-14)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 01 31 January 1997 (1997-01-31)

## Cited by

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## Designated contracting state (EPC)

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