

Title (en)
Device for producing foam

Title (de)
Vorrichtung zur Herstellung von Schaum

Title (fr)
Dispositif de production de mousse

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EP 1914003 A1 20080423 (FR)

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FR 0608929 A 20061012

Abstract (en)

The device for producing a rechargeable foam, comprises a reservoir (100) to supply foaming liquid of variable capacity, a liquid chamber (2) communicating with the reservoir by an inlet opening and with a mixing chamber (4) by an outlet opening, a first non-return valve (21, 22) disposed to the inlet opening of the liquid chamber, a second non-return valve (411, 412) disposed to the outlet opening, an air chamber (3) comprising an inlet with a third non-return valve, and a gripping means for a user to compress the air- and liquid chamber to expel the liquid and the air. The device for producing a rechargeable foam, comprises a reservoir (100) to supply foaming liquid of variable capacity, a liquid chamber (2) communicating with the reservoir by an inlet opening and with a mixing chamber (4) by an outlet opening, a first non-return valve (21, 22) disposed to the inlet opening of the liquid chamber, a second non-return valve (411, 412) disposed to the outlet opening, an air chamber (3) comprising an inlet with a third non-return valve, and a gripping means for a user to compress the air- and liquid chamber to expel the liquid and the air by the outlet opening of the liquid and the air. The second non-return valve comprises flexible maintenance unit in a closed position. The mixing chamber comprises a mixing unit to produce the foam expelled towards an outlet orifice, and a spring return to the air and the liquid chamber in their non-compressed positions to produce air and liquid aspiration. The second valve includes plastic knob maintained by elastic arms, which are fixed to the mixing chamber, a ball pushed against a truncated wall widening towards the ball and producing edges of the outlet of the liquid chamber, and a deformable part to ensure a tight closure of the outlet opening of the liquid. The gripping means comprises a net or a porous element disposed in a downstream of the outlet opening of the air and the liquid with respect to the flow towards an expulsion orifice. The ball is pushed by an elastic support against stop support of the mixing chamber. The elastic element is directed by a part of porous elastic foam disposed downstream of the outlet opening of air with respect to the flow through the expulsion orifice to achieve mixing of air and foaming liquid. The air chamber comprises two cylindrical walls centered around a single axis and joined to a bottom of the air chamber, and a piston closing the chamber and sliding along the axis of the chamber. The piston is pushed towards the bottom of the air chamber by the user on a protruding portion of the piston or piston is moved away from the bottom of the chamber by using the spring. The air chamber includes inlets arranged on the periphery of the chamber, and before which a valve membrane is maintained by the arm support. The mixing chamber is adjacent to the liquid chamber, and a ventilation pipe joining the outlet of the air and the mixing chamber.

Abstract (fr)

La présente invention concerne un dispositif de production de mousse rechargeable, activé manuellement et pouvant produire de la mousse dans toutes les positions notamment grâce à un réservoir (100) de capacité variable alimentant une chambre (2) de liquide expulsant du liquide moussant vers une chambre (4) de mélange par une sortie (25) avec un clapet (411, 412) anti-retour d'étanchéité comprenant des moyens (415) élastiques de maintien en position fermée. Le dispositif comprend de plus des moyens manuels de compresser une chambre (3) d'air et de la chambre (2) de liquide pour l'expulsion de liquide et d'air dans la chambre (4) de mélange pour produire de la mousse expulsée vers un orifice (5) de sortie, un ressort (39) de rappel ramenant les chambres (3, 2) d'air et de liquide dans leur position non compressée pour réaliser une aspiration d'air et de liquide.

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