

Title (en)  
Automatic mixing device.

Title (de)  
Automatische Mischvorrichtung.

Title (fr)  
Dispositif mélangeur automatique.

Publication  
**EP 0052576 A1 19820526 (FR)**

Application  
**EP 81810331 A 19810814**

Priority  
CH 855280 A 19801119

Abstract (en)  
[origin: CA1170690A] A mixing device is disclosed for the purpose of mixing a first fluid with a second fluid contained in a pressurized stream. The device includes a first fluid chamber for holding the first fluid, which includes a closure surface, an inlet, and an outlet, a second fluid inlet, a second fluid outlet, a second fluid circuit for directing the second fluid stream from the second fluid inlet to the second fluid outlet, a membrane slidably contained within the first fluid chamber and having one surface facing the closure surface, and an orifice between the membrane surfaces so that the first fluid can flow through that orifice, a spring in contact with the inner surface of the membrane to normally urge its surface against the closure surface in order to prevent the flow of the first fluid through the orifice, a second fluid valve for selectively directing at least a portion of the second fluid stream through the inlet of the first fluid chamber against the outer surface of the membrane so as to urge it against the spring and thereby separate the surface of the membrane from the closure surface and permit the first fluid to flow through the orifice and mix with the second fluid to create a fluid mixture, and a fluid mixture conduit for directing the fluid mixture thus prepared from the outlet of the first fluid chamber to the second fluid outlet. This mixing device can thus be incorporated into a shower head or the like so as to permit the shower head to be operated either with the second fluid alone, or with a mixture of first and second fluids, and at the same time preventing any flow of first fluid when there is no flow of the second fluid.

Abstract (fr)  
La présente invention concerne un dispositif mélangeur automatique permettant d'ajouter des produits cosmétiques tels que par exemple du savon liquide à de l'eau, en particulier dans une pomme de douche. Selon une forme de réalisation préférée, ce dispositif comporte un corps 61 de pomme de douche dans lequel est ménagé un réservoir 67 pour savon liquide. Une membrane 68 pourvue d'un orifice central est soumise à l'action d'un ressort 69 et à la pression de l'eau pénétrant par le canal 82 lorsque la plaque mobile 73 est en position basse, de telle manière que le mélange eau-savon s'effectue dans la chambre 83 et s'évacue par la chambre 77 par les orifices 78 du capuchon 75 mobile en rotation et en translation par rapport au corps 61.

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IPC 8 full level  
**B05B 1/18** (2006.01); **A46B 11/06** (2006.01); **B01F 5/00** (2006.01); **B05B 1/16** (2006.01); **B05B 7/04** (2006.01); **B05B 7/24** (2006.01); **E03C 1/046** (2006.01)

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