

Title (en)  
Fluid dispenser

Title (de)  
Spender für Medien

Title (fr)  
Distributeur de fluide

Publication  
**EP 0985454 A3 20010307 (DE)**

Application  
**EP 99117184 A 19990901**

Priority  
DE 19840721 A 19980907

Abstract (en)  
[origin: US6250509B1] The dispenser orifice (13) may be closed off microbiologically tight by a valve plug (25) closing contrary to the direction of flow (11) and is opened against a spring (34) in the direction of flow (11). The medium gains access to the orifice (13) via throttling elements (22, 21, 49) so that it creeps practically non-pressurized to the attaching surface area (51) of a droplet former (50) where it accumulates into a droplet suspending in the upside-down position, as a result of which the medium contained in the dispenser (1) may be protected from germ contamination and the droplet may be simply administered to an eye or the like. Instead of being formed by a plunger pump (9) the delivery and compression chamber (15) may also be formed by a tube.

IPC 1-7  
**B05B 11/00; B65D 83/14**

IPC 8 full level  
**A61M 11/00** (2006.01); **B05B 11/00** (2006.01); **B05B 11/04** (2006.01); **B05C 5/00** (2006.01); **B05C 17/005** (2006.01); **B65D 25/38** (2006.01);  
**B65D 47/20** (2006.01); **B65D 47/34** (2006.01)

CPC (source: EP US)  
**B05B 11/0044** (2018.07 - EP US); **B05B 11/0059** (2013.01 - EP US); **B05B 11/0064** (2013.01 - EP US); **B05B 11/0072** (2013.01 - EP US);  
**B05B 11/0075** (2013.01 - EP US); **B05B 11/1004** (2023.01 - EP US); **B05B 11/1026** (2023.01 - EP US); **B05B 11/1053** (2023.01 - EP US);  
**B05B 11/107** (2023.01 - EP US); **B05B 11/1074** (2023.01 - EP US); **B65D 47/2075** (2013.01 - EP US)

Citation (search report)  
• [XA] DE 19627228 A1 19980108 - PFEIFFER ERICH GMBH & CO KG [DE]  
• [X] EP 0500249 A1 19920826 - PILKINGTON VISIONCARE INC [US]  
• [X] US 4830284 A 19890516 - MAERTE LEO [DE]  
• [X] DE 4210225 A1 19930930 - KATZ OTTO [DE]  
• [X] DE 3503354 A1 19860807 - PFEIFFER ERICH GMBH & CO KG [DE]  
• [X] US 4770323 A 19880913 - DEBARD ANDRE [FR]

Cited by  
CN107352152A; US10220988B2; US10640268B2; US11155391B2; US11524822B2; EP2257476B2

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