

Title (en)  
Trigger sprayer.

Title (de)  
Flüssigkeitszerstäuber mit Auslösehebel.

Title (fr)  
Pulvérisateur de liquide avec levier de déclenchement.

Publication  
**EP 0098508 A1 19840118 (EN)**

Application  
**EP 83106297 A 19830628**

Priority  
• US 39568582 A 19820706  
• US 42362382 A 19820927  
• US 47215283 A 19830304

Abstract (en)  
A trigger sprayer pump for dispensing a fluid from a container includes a body (12) containing a pumping chamber (46) having an inlet (56) and an outlet conduit (62). A piston (18) is reciprocally mounted in the pumping chamber (46), the piston (18) having a convexly contoured outer end surface (104). A trigger (16) pivotally mounted and locked to the body (12) has a plurality of triangular supports (100) co-joined to form a tapered socket (102) receiving the outer end surface (104) of the piston (18). A channel-defining insert (24) is received in the outlet conduit (60), the insert (24) having a centrally situated, forwardly facing, fixed surface (175, 176). The fixed surface can be concave (176) or a convex (175) protuberance. An elastic, cup-shaped member (26) secured at its periphery (162) to the body (12) has a central aperture (150) situated in contact with and closed by the fixed surface (175, 176). The central aperture (150) of the cup-shaped member (26) is a cavity in the center of the interior surface of the member extending only partway through the member, at least two depressions (154, 156) on the exterior surface (158) of the member spaced from each other yet each intersecting the cavity (150), and a swirl chamber (166) situated between and connected to the depressions (154, 156). The top (14) of the pump (10) is mechanically secured to the outside of the outlet conduit (61) by tabs (81) straddling and locking to the conduit (61).

IPC 1-7  
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IPC 8 full level  
**B05B 1/34** (2006.01); **B05B 11/00** (2006.01)

CPC (source: EP)  
**B05B 1/3436** (2013.01); **B05B 11/1011** (2023.01)

Citation (search report)  
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• US 4257539 A 19810324 - CARY JOHN R, et al  
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