

Title (en)
Atomizer.

Title (de)
Zerstäuber.

Title (fr)
Pulvérisateur.

Publication
EP 0493643 A1 19920708 (EN)

Application
EP 91100088 A 19910102

Priority
EP 91100088 A 19910102

Abstract (en)
A pump-type atomizer is disclosed having a movable nozzle head (2) and plunger (3) that are operatively associated with a stationary cylindrical element (1). The cylindrical element (1) has an upper portion (1a) and a lower portion (1b), the lower portion (1b) having a tapered configuration such that its diameter decreases in a direction away from the upper portion. A valve element (8) within the cylindrical element (1) has valve body which cooperates with a passage (9) in plunger (3) to normally close the passage (9). The valve element (8) also has a piston (8b) which, when the nozzle head (2) is depressed, cooperates with the lower, tapered portion (1b) of the cylindrical element (1) to form, in cooperation with the plunger (3), encloses a portion of the liquid. Further movement of the nozzle head (2) increases the pressure on this fluid, which overcomes a biasing force on the valve to open the valve and allow the fluid to pass through the passageway and exit through the nozzle head (2).

IPC 1-7
B05B 11/00

IPC 8 full level
B05B 11/00 (2006.01)

CPC (source: EP)
B05B 11/1018 (2023.01); **B05B 11/1066** (2023.01); **B05B 11/107** (2023.01)

Citation (search report)
• [E] US 5002228 A 19910326 - SU JENO Y [TW]
• [Y] GB 2023225 A 19791228 - AEROSOL INVENTIONS DEV
• [Y] FR 2181198 A5 19731130 - STEP [FR]
• [A] US 4305530 A 19811215 - NOZAWA TAKAMITSU
• [A] GB 2110771 A 19830622 - AEROSOL INVENTIONS DEV

Cited by
FR2838788A1; CN112403000A; US6918514B2; WO03089151A1

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
EP 0493643 A1 19920708; EP 0493643 B1 19960814; DE 69121379 D1 19960919

DOCDB simple family (application)
EP 91100088 A 19910102; DE 69121379 T 19910102