

Title (en)  
Trigger-type sprayer with stopper member

Title (de)  
Hebelbetätigter Zerstäuber mit Stoppteil

Title (fr)  
Pulvérisateur à gâchette avec dispositif d'arrêt

Publication  
**EP 1317963 B1 20090506 (EN)**

Application  
**EP 02023623 A 20021018**

Priority  
JP 2001373167 A 20011206

Abstract (en)  
[origin: EP1317963A1] A sprayer eliminating the probability of loss of the stopper member which blocks the turn of the trigger lever, enabling the stopper member to be easily operated by one hand thus improving operability. A piston (21) is constituted by a first piston (18) and a second piston (22) coupled thereto in a manner to cover it. The second piston is covered by a pushing member (27). A stopper member (25) is provided to turn about the pushing member between a locking position and an unlocking in the direction in which the piston reciprocates. The pushing member has a hitting protuberance (27d) that hits the stopper member when the stopper member is turned to the locking position, and the stopper member has an escaping recess that escapes the hitting protuberance when the stopper member is turned to the unlocking position. When the stopper member is turned to the locking position, the pushing member is blocked from being pushed down. When the stopper member is turned to the unlocking position, the blocked state is reset. <IMAGE>

IPC 8 full level  
**B05B 9/01** (2006.01); **B05B 11/00** (2006.01)

CPC (source: EP KR)  
**B05B 9/01** (2013.01 - KR); **B05B 11/1014** (2023.01 - EP); **B05B 11/1023** (2023.01 - EP); **B05B 11/1059** (2023.01 - EP)

Cited by  
CN104291022A; EP1712293A4; CN103879679A; FR2864823A1; EP1561513A1; EP1917205A4; CN111094142A; US10569287B2; WO2007054996A1; US11892818B2; US7850046B2; WO2011142951A1; US8322631B2; WO2011142950A1; US8322630B2; US8608031B2; US8899448B2; US10406547B2; US11027302B2; WO2007008375A2; US11273459B2; US10106342B2; US10696499B2; US11511952B2; US11820290B2

Designated contracting state (EPC)  
DE FR GB IT NL

DOCDB simple family (publication)  
**EP 1317963 A1 20030611**; **EP 1317963 B1 20090506**; DE 60232219 D1 20090618; KR 100911854 B1 20090811; KR 20030047725 A 20030618; TW I222901 B 20041101

DOCDB simple family (application)  
**EP 02023623 A 20021018**; DE 60232219 T 20021018; KR 20020068024 A 20021105; TW 91123581 A 20021014