

Title (en)  
Multipurpose spray nozzle

Title (de)  
Mehrzweck Sprühdüse

Title (fr)  
Buse de pulvérisation à fonction multiple

Publication  
**EP 2345480 A1 20110720 (EN)**

Application  
**EP 10195007 A 20101214**

Priority  
IT BS20100003 A 20100115

Abstract (en)  
A multipurpose dispenser head (1) of a liquid comprises, on the top of the nozzle (50) a sealing device (30), to prevent leakages of liquid between the apertures (62, 64) enabling different types of jet to be dispensed.

IPC 8 full level  
**B05B 11/00** (2006.01); **B05B 1/12** (2006.01); **B05B 1/16** (2006.01); **B05B 1/34** (2006.01)

CPC (source: EP)  
**B05B 1/1654** (2013.01); **B05B 1/3436** (2013.01); **B05B 7/0018** (2013.01); **B05B 11/1057** (2023.01)

Citation (applicant)  

- US 6997397 B1 20060214 - KEUNG WING-KWONG [US], et al
- US 6536686 B2 20030325 - DUKES STEPHEN A [US], et al
- US 6446882 B1 20020910 - DUKES STEPHEN A [US], et al
- US 6382527 B1 20020507 - DUKES STEPHEN A [US], et al
- US 5664732 A 19970909 - SMOLEN JR RICHARD J [US], et al
- IT 1311301 B1 20020312 - GUALA DISPENSING SPA [IT]

Citation (search report)  

- [Y] DE 10058029 A1 20010613 - GUALA DISPENSING SPA [IT]
- [Y] US 7007867 B1 20060307 - DRAPEAU RAOUL EAST [US]
- [A] US 4247048 A 19810127 - HAYES THOMAS H
- [A] US 7036689 B1 20060502 - LAFHEY MARTIN S [US]

Citation (examination)  
WO 2010107483 A1 20100923 - JOHNSON & SON INC S C [US], et al

Cited by  
WO2022117889A2; DE112021006321T5

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2345480 A1 20110720**; IT 1397485 B1 20130116; IT BS20100003 A1 20110716

DOCDB simple family (application)  
**EP 10195007 A 20101214**; IT BS20100003 A 20100115