

Title (en)

Swirl nozzle for spraying a liquid.

Title (de)

Dralldüse zum Zerstäuben einer Flüssigkeit.

Title (fr)

Buse à tourbillonnement pour pulvériser un liquide.

Publication

**EP 0604741 A3 19941130 (DE)**

Application

**EP 93118034 A 19881209**

Priority

- DE 3742015 A 19871211
- EP 89900234 A 19881209

Abstract (en)

[origin: WO8905195A1] In order to improve a whirl nozzle for atomizing a liquid, which has whirl chamber (86) rising above a whirl chamber bottom (34) and tapering toward a nozzle outlet orifice (14) opposite said bottom, at least one whirl channel (42) laterally offset to a central axis (20) of the whirl chamber (86) and opening into the latter, and a whirl parameter of 1, so as to permit an increase in the whirl input pulse at constant or reduced whirl losses, a displacement element (62) rises above the whirl chamber bottom (34) to prevent the formation of an air core in the region of said floor. Said element is arranged concentrically about the central axis (20) and the external diameter of the section nearer said floor is equal to at least one diameter of the nozzle outlet orifice (14).

IPC 1-7

**B05B 1/34**

IPC 8 full level

**B05B 1/34** (2006.01)

CPC (source: EP US)

**B05B 1/3442** (2013.01 - EP US); **B05B 1/3478** (2013.01 - EP US)

Citation (search report)

- [X] US 3684194 A 19720815 - WAYNE ALEX
- [DA] FR 1560603 A 19690321

Cited by

WO2021209211A1; DE10024888B4; FR2802446A1; EP1116520A3; FR3055560A1; WO2018041594A1; DE102020204849A1

Designated contracting state (EPC)

CH DE LI

DOCDB simple family (publication)

**WO 8905195 A1 19890615**; DE 3851750 D1 19941110; DE 3856185 D1 19980618; EP 0346417 A1 19891220; EP 0346417 B1 19941005; EP 0604741 A2 19940706; EP 0604741 A3 19941130; EP 0604741 B1 19980513; US 5067655 A 19911126

DOCDB simple family (application)

**EP 8801133 W 19881209**; DE 3851750 T 19881209; DE 3856185 T 19881209; EP 89900234 A 19881209; EP 93118034 A 19881209; US 39390789 A 19890802