

(12)INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT
COOPERATION TREATY(PCT)

(19)World Intellectual Property Organization
International Bureau

(43) International Publication Date
October 3, 2002

(10) International Publication No.
WO02/076623 A1

(51) International Patent Classification7: B05B 1/32

(21) International Application Number: PCT/JP02/02843

(22) International Filing Date: 25 March 2002(25.03.2002)

(25) Filing Language: Japanese

(26) Publication Language: Japanese

(30)Priority Data:

2001/91018 27 March 2001(27.03.2001) JP

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(81)Designated States(national)

CN, KR, SG,US

(84)Designated States(regional)

European patent(AT,BE,CH,CY,DE,DK,ES,FI,FR,GB,GR,IE,IT,LU,MC,NL,PT,SE,TR)

Published

-with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

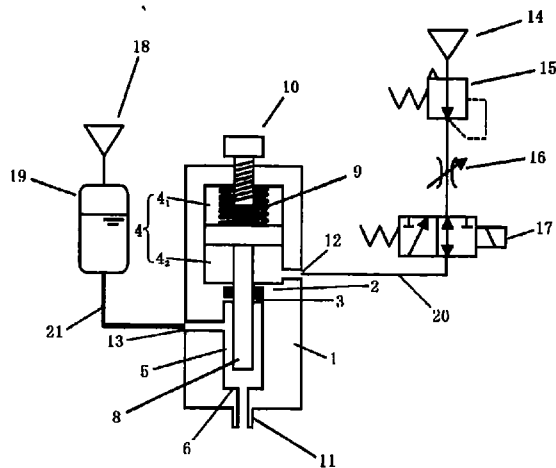
(54)Title: DROPLETS FORMING METHOD AND DEVICE FOR DISCHARGING
CONSTANT-VOLUME DROPLETS



162162



G00002



(57)Abstract: A phenomenon of sucking air via a discharge port in a nozzle tip end that occurs when a plunger rod (8) retracts away from a valve seat is prevented. A method or device of discharging droplets by sending pressure-regulated liquid or liquid stored in a container, as required, flying in droplets from the valve's discharge port (6), wherein a liquid supply amount is so controlled as to follow up a difference in pressure between the discharge port (6) and a flow passage in the valve body (1) to thereby prevent bubbles from being

mixed into via the discharge port (6). Droplets are continuously discharged at a high tact. A plunger rod (8) retracted by an air pressure opens the discharge port, and the plunger rod (8) advanced by the resilient force of a spring (9) discharges droplets via the discharge port. The retracting speed of the plunger rod (8) is so controlled by an air flow rate as to prevent bubbles from being mixed into via the discharge port when the plunger rod (8) retracts.