

Title (en)  
METHOD FOR DRIVING DROPLET-DISCHARGING HEAD AND DROPLET-DISCHARGING DEVICE

Title (de)  
VERFAHREN ZUR ANSTEUERUNG EINES TRÖPFCHENAUSSTOSSKOPFES UND TRÖPFCHENAUSSTOSSVORRICHTUNG

Title (fr)  
PROCÉDÉ D'EXCITATION D'UNE TÊTE DE DÉGAGEMENT DE GOUTTELETTES ET DISPOSITIF DE DÉGAGEMENT DE GOUTTELETTES

Publication  
**EP 3238941 B1 20201007 (EN)**

Application  
**EP 15873324 A 20151225**

Priority  
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Abstract (en)  
[origin: EP3238941A1] The present invention addresses the problem of efficiently and stably forming, when continuously discharging droplets from the same nozzle to coalesce the droplets and form large droplets, large droplets of increased liquid volume with a short drive cycle. When applying a drive signal to a pressure-generating means for expanding or contracting the volume of a pressure chamber, applying pressure on a liquid in the pressure chamber by driving said pressure-generating means, and discharging droplets from a nozzle, the above problem is solved by: a first drive signal PA1 comprising a first expanding pulse Pa1 for expanding the volume of the pressure chamber and contracting same after a specified period, a first contracting pulse Pa2 for contracting the volume of the pressure chamber and expanding same after a specified period, a second expanding pulse Pa3 for expanding the volume of the pressure chamber and contracting same after a specified period, and a second contracting pulse Pa4 for contracting the volume of the pressure chamber and expanding same after a specified period, in said order; and the pulse width PAW1 of the first expanding pulse Pa1 being greater than 2AL and less than 4 AL (AL being  $\frac{1}{2}$  of the acoustic resonance period of the pressure wave in the pressure chamber).

IPC 8 full level  
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Cited by  
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