

Title (en)

Droplet injection apparatus and method for driving droplet injection apparatus

Title (de)

Tröpfcheninjektionsvorrichtung und Antriebsverfahren für den Tröpfcheninjektionsvorrichtung

Title (fr)

Appareil d'injection de gouttelettes et procédé de commande d'appareil d'injection de gouttelettes

Publication

EP 2610060 A1 20130703 (EN)

Application

EP 12199189 A 20121221

Priority

JP 2011286948 A 20111227

Abstract (en)

A problem to be solved by the present invention is to provide a droplet injection apparatus controlling the driving in such a way that an ink injection operation is sequentially performed by time division by dividing all the channels into two or more groups, each being formed of the channels away from one another with one or more channels placed therebetween, and applying a drive signal to each group, the ink has a viscosity of less than 5.0×10^{-3} Pa·sec, the drive signal contains a first pulse formed as a rectangular wave and increasing the volume of the channel and restoring the volume to the original volume after a lapse of a given period of time and a second pulse formed as a rectangular wave and reducing the volume of the channel and restoring the volume to the original volume after a lapse of a given period of time, and the ratio of a voltage V_{on} of the first pulse to a voltage V_{off} of the second pulse is $0.5 \leq |V_{on}/V_{off}| \leq 0.8$.

IPC 8 full level

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CPC (source: EP)

B41J 2/04581 (2013.01); **B41J 2/04588** (2013.01); **B41J 2202/10** (2013.01)

Citation (applicant)

- JP 2000015802 A 20000118 - TOSHIBA TEC KK, et al
- JP 2001310461 A 20011106 - KONISHIROKU PHOTO IND

Citation (search report)

- [AD] JP 2001310461 A 20011106 - KONISHIROKU PHOTO IND
- [A] US 6412927 B1 20020702 - TAKAHASHI YOSHIKAZU [JP]
- [A] JP H1016212 A 19980120 - TEC CORP, et al
- [X] EP 1378358 A1 20040107 - TOSHIBA TEC KK [JP]

Designated contracting state (EPC)

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DOCDB simple family (application)

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