

Title (en)

Liquid droplet ejection apparatus and method for recovering nozzle of liquid droplet ejection apparatus

Title (de)

Flüssigkeitstropfenspendervorrichtung und Verfahren zur Wiederherstellung einer Düse einer Flüssigkeitstropfenausgabevorrichtung

Title (fr)

Appareil d'éjection de gouttelettes liquides et procédé de récupération de buse d'un appareil d'éjection de gouttelettes liquides

Publication

**EP 2837497 B1 20191002 (EN)**

Application

**EP 14172583 A 20140616**

Priority

JP 2013131601 A 20130624

Abstract (en)

[origin: EP2837497A2] Sedimentation of solid particles in an ink is affectively eliminated, and liquid droplets can be stably ejected for a long time. There is provided a liquid droplet ejection apparatus including: a head 1 that includes an ink chamber, a nozzle 12 provided in accordance with the ink chamber, and an energy giving device that gives energy to the ink in the ink chamber, the head performing printing on a print region of a recording medium C by ejecting liquid droplets from the nozzle 12; and a drive pulse generating device for generating, as the drive pulse, an ejection pulse that is used for ejecting the liquid droplets from the nozzle 12 and a micro-vibration pulse that micro-vibrates the ink in the ink chamber so as not to eject the liquid droplets from the nozzle 12, wherein the ink contains a dispersion medium and solid particles having higher specific gravity than that of a dispersion medium, and the liquid droplet ejection apparatus includes a refresh device for performing a micro-vibration operation for applying the plurality of micro-vibration pulses when the head is present in a non-print region, and an ejection operation for applying the plurality of rejection pulses after the micro-vibration operation and ejecting a liquid droplet amount equal to or greater than a capacity of the ink chamber from the nozzle 12.

IPC 8 full level

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CPC (source: EP)

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Cited by

DE102016100036A1; US11020982B2; US9796175B2; WO2018001441A1

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