

Title (en)
INKJET HEAD DRIVING METHOD AND INKJET PRINTING APPARATUS

Title (de)
TINTENSTRAHLKOPFANTRIEBSVERFAHREN UND TINTENSTRAHLDRUCKVORRICHTUNG

Title (fr)
PROCÉDÉ D'ENTRAÎNEMENT DE TÊTE À JET D'ENCRE ET APPAREIL D'IMPRESSION À JET D'ENCRE

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Application
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Abstract (en)
[origin: EP3127704A1] The purpose of the present invention is to provide an inkjet head driving method and an inkjet printing apparatus that form stable large droplets efficiently with short drive cycles, limit the occurrence of satellites, and are capable of high quality image printing. A first drive signal (PA1), which is for expanding and contracting the volume of a pressure chamber to discharge at least two droplets from the same nozzle and unite same immediately after discharge to form a large droplet, comprises a first expansion pulse (Pa1) for expanding and contracting the volume of the pressure chamber, a first contraction pulse (Pa2) for contracting and expanding the volume of the pressure chamber, a second expansion pulse (Pa3) for expanding and contracting the volume of the pressure chamber, and a second contraction pulse (Pa4) for contracting and expanding the volume of the pressure chamber, in said order. A first droplet is discharged by the application of the first expansion pulse (Pa1) and the first contraction pulse (Pa2), a second droplet is discharged by application of the second expansion pulse (Pa3) and the second contraction pulse (Pa4), and the pulse width (PWA1) of the first expansion pulse (Pa1) is 0.4 AL to 2.0 AL (wherein AL is 1/2 of the acoustic resonance period of the pressure wave in the pressure chamber).

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Citation (search report)
• [X] US 2011292108 A1 20111201 - IZUMI TAKAO [JP], et al
• See references of WO 2015152185A1

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US2021129530A1; EP3789201A1; CN112440569A; EP3863859A4; US11673387B2; US11648772B2; US11390074B2

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