

Title (en)

Ink jet apparatus, ink apparatus driving method, and storage medium for storing ink jet apparatus control program

Title (de)

Tintenstrahlapparat, Ansteuerungsverfahren für Tintenapparat und Speichermedium zur speicherung des Ansteuerungsprogrammes für Tintenstrahlapparat

Title (fr)

Appareil à jet d'encre, procédé de commande pour appareil à encre et support de mémorisation pour logiciel de commande pour appareil à jet d'encre

Publication

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Application

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Priority

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Abstract (en)

Three types of ink droplets, that is, large, medium, and small droplets are ejected to produce a gray-scale image, and three drive waveforms are prepared for each of the three types of ink droplets. The drive waveform to print a dot is selected by judging whether there is ink ejection immediately before and/or after the dot to be printed and the type of each droplet ejected immediately before and/or after the dot to be printed. An optimum drive waveform can be selected according to vibrations in the ink channel. Thus, high-quality printing is achieved without partially unstable dots and changes in the ink droplet volume. A piezo ink droplet ejecting apparatus for printing gray-scale images, comprising a controller for determining an ejection waveform to be used and providing activation instructions to the activation circuit on a basis of a size of a required dot and whether another dot is present at at least one of immediately before and immediately after the required dot. <IMAGE>

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Citation (search report)

- [X] EP 0895862 A1 19990210 - SEIKO EPSON CORP [JP]
- [A] EP 0636477 A2 19950201 - TEKTRONIX INC [US]
- [A] EP 0738598 A2 19961023 - SEIKO EPSON CORP [JP]
- [X] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 11 30 September 1999 (1999-09-30)
- [A] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 03 30 March 2000 (2000-03-30)

Cited by

EP1985451A1; GB2426614A; EP4052908A1; US8057002B2

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